# WORLD ECONOMIC SURVEY 1991

CURRENT TRENDS AND POLICIES IN THE WORLD ECONOMY

UNITED NATIONS

E/1991/75
ST/ESA/222

Department of International Economic and Social Affairs

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NOTE

Symbols of United Nations documents are composed of capital letters combined with figures.

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## PREFACE

1990 was an extraordinary year of shocks and contrasts for the world economy. The Gulf conflict - apart from immense human suffering - brought about destruction of infrastructure and environmental pollution; a sharp increase in energy prices; intensified economic difficulties for many countries; and a sudden erosion of consumer and business confidence in much of the world. The dramatic developments in Eastern Europe and the Soviet Union ushered in an era of transition from the command economy to the market system - a change that holds great potential for the world economy but has proved far more difficult than expected, and has resulted in a sharp fall in the output of these economies. Some developed economies went into recession and others nearly did, ending their longest expansion in the post-Second World War period. Many developing economies continued to languish under the burden of problems that have persisted over most of the last decade.

These developments resulted in the slowest rate of growth of world output since 1982. Per capita income declined in large parts of the world. The forecast for 1991 is zero growth overall, with large-scale declines in the output of Eastern Europe and the Soviet Union and recession already visible in the developed market economies.

Yet a significant number of countries, both developed and developing, continued to grow strongly in 1990, some growing even faster than in 1989. Some have survived the Gulf crisis and the slowdown in the world economy relatively unscathed. World trade retained some of its buoyancy, with exports of some countries growing vigorously.

The *World Economic Survey, 1991* examines these and other developments and issues. Chapter I presents an overview of the major issues facing the world economy and the main agenda for national and international action. Chapter II examines the trends in global output and macroeconomic policies and the issues of growth and development in different regions and country groups. The problems of transition in Eastern Europe and the Soviet Union and the diversity of experience of the developing countries, particularly in the aftermath of the Gulf crisis, receive special attention. Major trends in world trade and issues associated with the trading system are discussed in chapter III. Trends in the transfer of resources among countries and the problems of financing economic reform in Eastern Europe and the Soviet Union are examined in chapter IV, which also analyses the issue of monetary union in the European Community. Chapter V discusses the tumultuous developments in the international energy markets in 1990 and the environmental problems associated with the production and consumption of energy.

The profound changes that have taken place in Eastern Europe and the Soviet Union and in the political relations between East and West have far-reaching implications for the world economy. Chapter VI examines the implications of these changes for the economic relationship between East, West and South. Some economic aspects of the reduction in military expenditure resulting from the end of the cold war are discussed in chapter VIII.

In the past, the *Survey* has extensively examined the problems of external debt, which have remained a major obstacle to growth in a large number of developing countries. Chapter VII of the present *Survey* examines current international policy for reducing the debt burden.

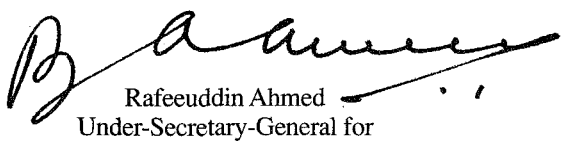
Chapter IX is devoted to three special topics: poverty and the socio-economic attainment of women, environmental accounting and the system of national accounts, and selected demographic indicators.

The *Survey* contains, finally, an expanded statistical annex of world economic and financial data, which we hope will increase its usefulness.

The *Survey* has been prepared by the Department of International Economic and Social Affairs with the cooperation of other agencies and offices of the United Nations system. We express our appreciation to all of them. This year special contributions have been received from the United Nations Conference on Trade and Development. The *Survey* has, as in the past, drawn extensively on the data and analysis of the United Nations regional commissions, the General Agreement on Tariffs and Trade, the International Monetary Fund, the World Bank, and the Organisation for Economic Co-operation and Development.

For many years, contributions have also been made to the *World Economic Survey* and other work of the Department by a United Nations official who has been one of the intellectual pillars of the Secretariat, Mr. Sidney Dell. These contributions were never acknowledged, in conformity with United Nations convention on individual anonymity. Mr. Dell passed away last year. He is sorely missed and we pay tribute to his memory.

We hope that the *World Economic Survey, 1991* will be of use to the public, the policy makers and academic institutions and, above all, that it will be of assistance to the Economic and Social Council and the General Assembly in their deliberations on the current and emerging issues in the world economy and in setting out their agenda for action.



Rafeeuddin Ahmed
Under-Secretary-General for
International Economic and Social Affairs

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## EXPLANATORY NOTES

The following symbols have been used in the tables throughout the report:

Two dots (..) indicate that data are not available or are not separately reported.

A dash (--) indicates that the amount is nil or negligible.

A hyphen (-) indicates that the item is not applicable.

A minus sign (-) indicates a deficit or decrease, except as indicated.

A full stop (.) is used to indicate decimals.

A slash (/) between years indicates a crop year or financial year, for example, 1989/90.

Use of a hyphen (-) between years, for example, 1986-1990, signifies the full period involved, including the beginning and end years.

Reference to "tons" indicates metric tons and to "dollars" ($) United States dollars, unless otherwise stated.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates. In most cases, the growth rate forecasts for 1991 and 1992 are rounded to the nearest half of a percentage point.

Details and percentages in tables do not necessarily add to totals, because of rounding.

The following abbreviations have been used:

| | |
|---|---|
| ASEAN | Association of South-East Asian Nations |
| CAP | Common Agricultural Policy |
| CCFF | Compensatory and Contingency Financing Facility of IMF |
| CFCs | Chlorofluorocarbons |
| CMEA | Council for Mutual Economic Assistance |
| DAC | Development Assistance Committee of OECD |
| EBRD | European Bank for Reconstruction and Development |
| EC | European Community |
| ECE | Economic Commission for Europe |
| ECLAC | Economic Commission for Latin American and the Caribbean |
| ECU | European Currency Unit |
| EEA | European Economic Area |
| EEP | Export Enhancement Program |
| EFTA | European Free Trade Association |
| EMS | European Monetary System |
| EMU | Economic and Monetary Union |
| ERM | Exchange Rate Mechanism |
| ESAF | Enhanced Structural Adjustment Facility of IMF |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| ESCB | European System of Central Banks |
| f.o.b. | Free on board |
| FTA | Free trade agreements |
| GATT | General Agreement on Tariffs and Trade |
| GDP | Gross domestic product |
| GNP | Gross national product |
| GSP | Generalized System of Preferences |
| IDA | International Development Association |
| IDB | Inter-American Development Bank |
| IEA | International Energy Agency |
| IFC | International Finance Corporation |
| IMF | International Monetary Fund |
| LIBOR | London interbank offered rate |
| mbd | Million barrels per day |

| | |
|---|---|
| MFA | Multifibre Arrangement |
| MFN | Most favoured nation |
| MYRA | Multi-year rescheduling agreement |
| NATO | North Atlantic Treaty Organization |
| NIE | Newly industrialized economy |
| NMP | Net material product |
| ODA | Official development assistance |
| OECD | Organisation for Economic Co-operation and Development |
| OPEC | Organization of the Petroleum Exporting Countries |
| PHARE | Pologne-Hongrie: Assistance à la restructuration économique |
| PRD | Previously rescheduled debt |
| Project LINK | International Research Group of Econometric Model Builders, with Headquarters at the University of Pennsylvania at Philadelphia |
| SDR | Special drawing rights |
| SIPRI | Stockholm International Peace Research Institute |
| TRIMS | Trade-related investment measures |
| TRIPS | Trade-related intellectual property rights |
| UNCTAD | United Nations Conference on Trade and Development |
| UN/DIESA | Department of International Economic and Social Affairs of the United Nations Secretariat |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The term "country" as used in the text of this report also refers, as appropriate, to territories or areas.

For analytical purposes, the following country classification has been used:

| | |
|---|---|
| *Developed market economies:* | North America, southern and western Europe (excluding Cyprus, Malta and Yugoslavia), Australia, Japan, New Zealand, South Africa. |
| *Developing countries:* | Latin America and the Caribbean, Africa (other than South Africa), Asia and the Pacific (excluding Australia, Japan and New Zealand), Cyprus, Malta, Yugoslavia. For some analyses, China has been shown separately. |
| *South and East Asia:* | Unless otherwise stated, South Asia, South-East and East Asia, excluding China. |
| *Mediterranean:* | Cyprus, Malta, Turkey, Yugoslavia. |
| *West Asia:* | Bahrain, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, Yemen. |
| *Major developed market economies (or the Group of Seven):* | Canada, France, Germany,[a] Italy, Japan, United Kingdom of Great Britain and Northern Ireland, United States of America. |

For particular analyses, developing countries have been subdivided into the following groups:

| | |
|---|---|
| *Capital-surplus countries (or surplus energy exporters):* | Brunei Darussalam, Iran (Islamic Republic of), Iraq, Kuwait, Libyan Arab Jamahiriya, Qatar, Saudi Arabia, United Arab Emirates. |

Deficit countries (or capital-importing countries), subdivided into the following two subgroups:

| | |
|---|---|
| *Other net energy exporters (or deficit energy exporters):* | Algeria, Angola, Bahrain, Bolivia, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Malaysia, Mexico, Nigeria, Oman, Peru, Syrian Arab Republic, Trinidad and Tobago, Tunisia, Venezuela. |

[a] Through accession of the German Democratic Republic to the Federal Republic of Germany with effect from 3 October 1990, the two German States have united to form one sovereign State. As from the date of unification, the Federal Republic of Germany acts in the United Nations under the designation "Germany".

| | |
|---|---|
| *Net energy importers:* | All other developing countries. |
| *Recent surplus economies:* | Hong Kong, Republic of Korea, Singapore, Taiwan Province of China. |
| Miscellaneous groupings: | |
| *Fifteen heavily indebted countries:* | Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, Yugoslavia. |
| *Sub-Saharan Africa:* | African continent and nearby islands, excluding Nigeria, northern Africa (Algeria, Egypt, Libyan Arab Jamahiriya, Morocco and Tunisia), South Africa. |

The designations of country groups in the text and the tables are intended solely for statistical or analytical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.

# Chapter I

## THE STATE OF THE WORLD ECONOMY

### Towards zero growth

In 1990 economic activity slowed down in all parts of the world, but not for any one dominant reason. In spite of globalization and growing interdependence, different forces were at work in the various regions of the world.

As in 1989, unexpected political developments in 1990 produced severe economic shocks and also seemed to alter many of the premises for future development. The political reform efforts in Eastern Europe, the German unification, and the turmoil in the Soviet Union produced considerable economic disarray and sharp drops in output.

Iraq's invasion of Kuwait at the beginning of August sent a shock-wave through the world economy, as oil prices soared, but order in oil markets was soon restored. The crisis in the Gulf affected the region itself quite profoundly and the economic partners of Iraq and Kuwait suffered losses of different kinds, but the impact on the world economy seems in the end to have been smaller than feared.

In the industrialized countries the recession deepened and growth slowed, except in Japan and Germany. In several countries industrial output actually declined. In Latin America some reform programmes seemed to hold while others collapsed, but for the continent as a whole there was a slight decline in output. In Africa output grew about as fast as population, which was better than in the past, but recovery and genuine development seemed as remote as before. Yet in many parts of Asia, growth was vigorous and sustained.

The combined effect of these changes was to slow down the growth of global output abruptly - from 3 per cent in 1989 to 1 per cent in 1990. World population in 1990 is estimated at 5.3 billion and growing at 1.8 per cent per year, so world economic output last year fell short of population growth.

The same trends still prevail, and the forecast of the Secretariat points to zero growth for the world as a whole in 1991: that is a decline in per capita output close to 2 per cent. Some recovery is expected in 1992 but even then per capita output in Latin America and Africa is expected to be only barely maintained (see table I.1.).

Many developments that are not reflected in the depressing growth performance may be considered more positive. In Latin America, although fiscal reform and structural adjustment to cope with hyperinflation foundered in some countries it was more successful in others. Some of the loss in momentum could be seen as the more or less inevitable by-product of stabilization. In Africa, including South Africa, there were signs of important political change. In most industrialized countries unemployment declined somewhat in 1990, but in some it has increased again in early 1991.

None the less the economic situation in virtually all regions of the world is far from satisfactory, and the prospect that it will not soon be radically improved raises a number of disturbing questions. These take different forms, but they have one common theme: is this the best that can be done?

Table I.1. Growth of the world economy, 1988-1992

(Annual rate of change)

| | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|
| World output | 4.3 | 3.0 | 1.0 | 0.0 | 2.1 |
| Developed market economies | 4.3 | 3.3 | 2.4 | 1.4 | 3.0 |
| Eastern Europe and the Soviet Union | 3.7 | 1.4 | -6.3 | -9.5 | -4.5 |
| Developing countries | 5.0 | 3.4 | 2.9 | 3.5 | 5.0 |
| Western hemisphere | 0.8 | 1.1 | -0.7 | 1.5 | 3.0 |
| Africa | 2.1 | 3.3 | 3.4 | 3.0 | 3.0 |
| West Asia | 1.1 | 2.4 | 0.0 | -0.5 | 7.0 |
| South and East Asia | 8.7 | 6.0 | 6.1 | 5.5 | 6.0 |
| China | 11.3 | 3.3 | 4.8 | 5.5 | 6.0 |
| Mediterranean | 1.4 | 1.0 | -0.7 | 2.0 | 4.0 |

*Source*: Table II.1.

Does the contraction of output and employment in the economies in transition in Eastern Europe have to be so deep and impose such a heavy social cost as it seems to be doing?

Why, after all these years of "adjustment" in the 1980s are Latin American economies still not out of the debt trap, and why is there so much stagnation and hyperinflation - not in one country but in several, and in countries that have in the past been much more successful?

Why do African countries remain locked in a pattern of stagnation and decline after years of intense international attention and assistance? Why are the poorest countries of the world becoming steadily poorer after a decade of proclamations about the need for poverty alleviation? Why do natural disasters in least developed countries continue to take such a heavy human and economic toll?

Why on the other hand are over 10 Asian countries, both large and small, getting things right and demonstrating that development is indeed possible?

Was the present recession in North America and Europe inevitable? Will it be overcome in a manner that will restore a climate of stable and dynamic growth to the world economy?

Why is income distribution worsening and poverty and drug abuse spreading in so many rich countries?

When economic performance falls short of the apparent potential and results in stagnation, rising unemployment or uncontrollable inflation, it may be due to shocks beyond the control of individual Governments. The necessary adjustments might even in the best of circumstances be costly and time-consuming. But adjustment policies may be inadequate; sometimes policies themselves or excessive passivity, rather than external or political shocks, may be the source of the problem.

There are two very different approaches to policy failure. Sometimes it is assumed that there really is not much argument about the economic policies that should be pursued in the general interest. If inappropriate policies are adopted it is either because Government is weak or it is faced with political and social compulsions. Ignorance, error or corruption and selfish abuse of the powers of the State may be to blame, or else absence of leadership, which is essential to the building of a social and political consensus around the sound but usually painful policies that are called for.

But the policies and the theories behind them can also be very much in dispute. The prevailing notions about "sound" policies may be mistaken. In particular, if economic malaise is widespread, it may be suspected, in view of the pervasive interdependence of national economies, that international economic cooperation is inadequate.

These issues will be touched on in the following pages; but it should be remembered that the backdrop for the analysis of recent developments and short-term prospects is one of widespread malfunctioning and disequilibria which are no less worrisome because some developing countries, notably in Asia, are doing well or because for many developed market economies the current situation might be no more than a hiatus in the relatively long period of moderate growth that started in 1983.

This introduction contains a brief review of implications of the more spectacular shocks to the world economy in 1990, followed by some observations about the evolution of long-standing development issues and a concluding discussion of policy concerns.

## Eastern Europe and the Soviet Union

The difficulties involved in the transition from central planning to a market-based economic system became increasingly apparent in the course of the year and were aggravated by the sudden integration of the former German Democratic Republic into a unified Germany, the collapse of the old system for trade and payments among the countries belonging to the Council for Mutual Economic Assistance (CMEA), and the mounting disruptions in the Soviet economy.

The impact of unification on Germany was heavy but mixed: there was a boost to consumption and growth but also a need for massive public transfers to the eastern region, some inflationary strain and a resort to both fiscal and monetary restraint. The devastating impact on industrial output and employment in the eastern parts led to inevitable but premature questioning of the wisdom of instant integration. Debates about the advisable speed of the adjustments involved in the transition process were also intense in other countries and tended to paralyze the Soviet reform process.

These events occupy a large part of this *Survey*. However, owing to the autarkic character of the old Eastern bloc the economic impact on the rest of the world has been limited as of now, except for a few countries closely linked by trade and aid to that bloc. Despite the recognized need for external assistance and the preoccupation of international organizations with the transition process, progress in foreign support has been slow. The apprehensions about a large diversion of resources from developing countries have not so far been borne out, but there has been a definite diversion of attention, and in due time a diversion of official capital flows cannot be excluded, especially if the Soviet Union becomes capable of absorbing a massive transfer of resources.

Western countries have responded to the need for coordination and assistance in various ways, notably by establishing a body under the aegis of the European Community and by launching the European Bank for Reconstruction and Development. However, there is a striking lack of coordination among the Eastern European countries themselves, which may have to be remedied.

## The crisis in the Gulf

International cooperation in crisis management seemed successful in connection with the response to the invasion of Kuwait, although the long-term consequences of the crisis are difficult to predict and the political tensions of the region are not necessarily nearer a resolution than before.

In the new constellation of international relations, the Security Council was able to impose sanctions on Iraq which were more effective than any ever attempted. Alternative oil supplies were quickly mobilized. Prices none the less rose steeply, causing considerable distress to poor oil-importing countries, but when military measures were resorted to in order to enforce the resolutions of the Security Council the widely expected panic in oil markets was turned into a return to pre-crisis levels.

The short-term economic consequences of the Gulf crisis were extremely diverse. They are extensively discussed in subsequent chapters. The suffering and losses of the many migrant workers in the region and of the civilian populations were heavy. The losses in human lives have not yet been accounted for.

The crisis also inflicted economic losses on the economic partners of Kuwait and Iraq; these were of varying nature and hardship, involving losses of assets and remittances, breaches of contracts for payment or delivery, trade forgone, cessation of capital flows. Tourism east of the Balkans and in Africa was severely disrupted as also were shipping services and the use of the Suez Canal and port facilities all over the region.

Claims against Iraq for damage will be compensated according to the procedure established by the Security Council, which may take a long time given the damage inflicted on the Iraqi economy during the war and its aftermath.

The damage to the economy and environment of Kuwait was quite substantial. While its economy can recover in a few years it will take longer to reverse the environmental degradation. Thus, the costs to the region and its partners were considerable and there were also costs to the coalition of countries that joined to expel Iraq from Kuwait. Many energy importing developing countries were severely affected by the rapid increase in oil prices in the second half of 1990, yet the world-wide disruption in oil markets was limited and might have been even smaller if the flare of oil prices in the autumn of 1990 had been contained. The crisis also gave a new impulse to discussions about the possibility of ensuring greater stability to energy markets in the future.

## Natural and man-made disasters

The number of disasters and emergencies multiplied in 1990 and the beginning of 1991 and strained official and non-governmental relief organizations beyond their capacity. Major cyclones and floods have again afflicted Bangladesh; drought and famine are again threatening millions of Africans, and the outbreak of cholera in Peru is spreading to neighbouring countries.

What is becoming increasingly clear is the combined role of poverty and politics, even in natural disasters, and the failure to contain their impact. The victims are overwhelmingly the poor. Flood disasters could be contained by relatively cheap cyclone shelters and embankments, reducing the death tolls by a factor of ten or more. African food shortages are not only due to drought but also to armed conflicts and ineffective agricultural policies. Where urban populations grow rapidly but water treatment facilities are not provided, cholera is a stochastic variable waiting to occur. The devastation caused by earthquakes increases exponentially with poverty levels and primitive construction.

While emergencies due to natural disasters call for instant humanitarian relief they are symptoms of a poverty that claims many more victims in its daily manifestations of undernourishment and excessive mortality. The World Health Organization (WHO) has for many years insisted that for the improvement of the health situation in developing countries water supplies, nutrition, and steps to remedy poverty are indispensable.

Other manifestations of poverty include the violence and crime that are erupting in Latin American and African countries on a new and disturbing scale, as well as in some of the richest countries of the world. The international narcotics trade links the social problems of those countries to those of producing peasants whose old crops offer no escape from grinding poverty.

In the category of man-made disasters, the aftermath of the Gulf crisis created millions of Kurdish refugees and widespread food shortages and risks of epidemics. Devastating civil wars continue to paralyze economic life in a great number of countries in Africa, where they have generated millions of refugees and set development back immeasurably. The end of the cold war may contribute to the exhaustion of the feuding factions and improve the chances for peace and the reconstitution of government, but poverty threatens to exacerbate and perpetuate the conflicts in a vicious circle.

That poverty is at the heart of the challenge of international development has always been obvious. What is disturbing is that, except in those Asian countries where the thrust of development has been vigorous and sustained, poverty is increasing rather than receding.

## Human development

Poverty and its related dimensions - malnutrition and ill health, illiteracy, and inadequate shelter - have for this reason received renewed attention in development policy formulation in recent years. Poverty alleviation has been given high priority in bilateral and multilateral assistance programmes, and ways have been sought to protect the weakest groups in societies, especially children who are the first to suffer, from the consequences of adjustment policies that reduce income levels and government spending.

Studies by the United Nations Development Programme (UNDP), the regional commissions and the World Bank have shown that countries with higher average income levels do not necessarily have less poverty or illiteracy than poor countries. There is a need for deliberate policies to combat poverty and ensure minimum standards of health and education, not only on humanitarian grounds but because the population itself is the principal resource of any country and the children of today are the makers of development tomorrow.

Related to the issue of human development there is thus the issue of human opportunities, and a new and important concern has arisen in many developing countries about barriers to entrepreneurship and initiative and the need for greater economic freedom and security.

However, human development and microeconomic improvement are not alternatives to macroeconomic policies, which stimulate growth by raising investment and income levels in an environment of monetary stability and ensure adequate external resource flows.

The success of many Asian countries may be ascribed to careful attention to all these aspects of development. Sustained investment in education and health and the fostering of entrepreneurship, not by wholesale deregulation but by a pragmatic balance between market freedom and cooperation between Government and the private sector, have been accompanied by a vigilant pursuit of macroeconomic stability.

However, it should also be noted that most Asian countries were not subjected to the same financial shocks in the 1980s as the commodity exporters of Africa and Latin America. The financial setbacks suffered from depressed commodity prices and terms of trade, and in many cases from crises of external indebtedness, remain the principal reasons for the widespread worsening of the human condition in the 1980s and early 1990s.

## Financial flows for development

As described in detail in chapter IV, the outlook for development finance is still bleak. The transfer of financial resources from developing to developed countries remains a serious problem for a number of heavily indebted Latin American countries, but it has also arisen from the repayment of debt by successful Asian borrowers. What is more disturbing is the drying up of development finance in general and the protracted debt crisis.

The debt crisis seems to have moved into a phase characterized by greater realism and convergence of views. Debtors in impossible situations have suspended payments and bank creditors, most of whom had already made provisions for this eventuality, tend to yield to realities. The International Monetary Fund (IMF) has found ways to mobilize support to cope with arrears to the Fund. This form of crisis management left the issue of new finance unsolved. Countries arguing that they cannot pay their old debts are clearly in a weak position when they try to contract new loans; neither has the cash flow improved much in countries benefiting from debt reduction. In the short term, net foreign exchange gains have been quite meagre and it may only be in five or more years that actual relief will be achieved.

Official development assistance (ODA) to those developing countries that qualify for it is not expected to grow any faster than the gross domestic product (GDP) in the donor countries; it has been slowing down, and the risk that some of it will be diverted towards Eastern Europe cannot be ruled out. It has already happened in the case of food aid. The international financial institutions have reached the point where they are not contributing significant net resources. It is a widespread view that development finance will be very short in years to come. Only countries that succeed in gaining access to the international capital market can count on substantial external financial flows.

Restoring creditworthiness is not impossible, and a few countries have shown the way. But among the difficulties many other countries will meet in trying to work themselves out of the debt trap, an issue that looms very large is the high long-term rate of interest. It has been instrumental in bringing about the debt servicing difficulties of many countries and in perpetuating them, and it will be a serious impediment to the financing of such projects as the large infrastructure investments in power and transportation that will be called for.

As long as long-term rates of interest are a great deal higher than the rates of growth of output and exports, the prospects for development finance are uncomfortable. If the rate of interest is higher than the rate of growth of the resources out of which it has to be serviced, debt problems are arithmetically inevitable. The rate of interest is one of the most important prices in the world economy, and the question of why it is so high links the problems of development finance to the situation in the world economy at large.

## A global shortage of savings?

In the course of 1990, the concern arose that interest rates would rise even higher as the result of the great demands for reconstruction in Eastern Europe and the Soviet Union, and of a so-called global shortage of savings to meet these demands. The implication seemed to be that what is called for in all countries is an increase in savings.

But more saving and less spending out of current income does not by itself generate investments in infrastructure, capital and equipment. If anything, declining demand is likely to discourage investments. In the end, global saving is the same as global investment, and there are strong reasons to support the view that it is not savings that cause investment, but investment that produces growth and savings - at least as long as there are unemployed resources.

However, this approach does not take into account the capacity of Governments to dissave and borrow for purposes of public consumption rather than investment. A number of countries all over the world, starting with the richest one, chose in the 1980s to live with substantial budget deficits even in years of relatively high economic activity, checking inflationary pressures by monetary restraint and high interest rates to attract foreign funds.

To the extent that this is at issue, the argument is not about a global shortage of savings but about the mix of fiscal and monetary policy in the major economies. In any event, this question has to be considered in the light of recent developments leading to the end of the cold war. It is not only that the political climate has changed, but there is also a fresh opportunity to raise savings or effect a major recrientation of fiscal expenditures.

## Reductions in military expenditure

Following the momentous political changes in the world, a window of opportunity has finally opened up for the realization of the fundamental objective of the United Nations: reduction of military expenditures.

The waning of the threat of war between the largest nuclear powers and the formal dissolution of the Warsaw Treaty Organization as a military alliance in March 1991 marked a very important stage in the transition away from a world whose security was essentially dependent upon a balance of terror between two major military alliances.

The confrontation between the forces on either side of a European divide had ideological and political ramifications which affected almost all countries of the world. The end of this military confrontation and the adoption of transparently defensive military doctrines will lead to substantial reductions in forces, both conventional and nuclear, in that continent, as well as in North America. The prospects are, then, for heavy reductions in military establishments in the members of the North Atlantic Treaty Organization (NATO), in the countries of Eastern Europe and in the Soviet Union. Some costs will be incurred in the short to medium term in the transition to lower military establishments, but the gains in terms of reduced military expenditures will constitute a major new source of resources. These funds could be applied both for domestic purposes and also for investments abroad in support of growth and development.

The end of confrontation and the beginning of cooperation between the Soviet Union and the members of the NATO alliance to help to solve regional conflicts itself opens the prospect for a more peaceful world order. Much will depend upon the political decisions of Governments, but the outlook for greatly reduced military expenditure in all countries of the world is probably better now than at any time since the onset of the cold war in the late 1940s. Reductions in military outlays in developing countries - in the context of enhanced collective security - could provide them with additional resources to invest in human development and physical infrastructure and enable their citizens to start off on a self-sustaining path to higher living standards.

## The world trading system and the Uruguay Round

The world trading system is in a process of great change, which reflects fundamental developments in communications and transportation as well in political and ideological orientations. Regional trading arrangements are solidifying in Europe and North America and are starting to emerge in Asia.

The failure to bring the Uruguay Round to an agreed conclusion within the deadline set for it at the end of 1990 was a source of disappointment and concern. The world trading system is seen to be at risk, although trade has remained comparatively buoyant. The failure of the European Community and the United States to come to terms on agricultural trade illustrates the difficulties of negotiators faced with great political sensitivity in their constituencies.

There may be an element of exaggeration both in the hopes attached to these negotiations and the fears evoked by their stalemate. An agreed outcome to the Uruguay Round would not, for instance, bring an end to the formation of blocs and trading ar-

eas, many of which have already emerged and are certainly here to stay, in spite of the vivid apprehensions that they inspire among those who do not participate in them. Such blocs, however, are not necessarily detrimental to the trading system or the general welfare, and they are not in themselves in violation of the General Agreement on Tariffs and Trade (GATT).

Much depends on the kind of agreement that emerges, but it is certain that it will not bring short-term miracles to world trade. On the other hand, protracted negotiations, or even continuation of the stalemate are unlikely by themselves to produce a breakdown in the world trading system or to jeopardize seriously economic progress.

The significance of agreement seems to lie far more in the reassertion of a regime of law and rules that it would imply, and the barriers that it would raise against the use of intimidation in bilateral trade arrangements which, in a world of enormous disparities of wealth and trading power, is the main source of alarm in weaker countries and has made developing countries join the GATT in ever greater numbers just as the countries of Eastern Europe.

## The International Development Strategy

After more than two years of preparations the General Assembly, in December 1990, adopted a document spelling out an agreed understanding of the national and international actions needed to accelerate development in the 1990s. The International Development Strategy for the Fourth United Nations Development Decade incorporated the principles contained in the Declaration on International Economic Co-operation, in particular the revitalization of Economic Growth and Development of Developing countries, adopted earlier in the year at the eighteenth special session of the General Assembly; but the Strategy addresses in greater detail the issues and challenges arising from the need to reverse the adverse trends in those many countries where economic conditions stagnated or deteriorated in the 1980s and to release the potential for economic and social development.

The Strategy emphasizes the magnitude of the task and the need for serious commitment on the part of all countries, including the developing countries, which must mobilize their people and promote the skills and abilities needed for industrial and agricultural progress and effective government, while recognizing the importance of human development, entrepreneurship, and respect for human rights and equity. But a stable and progressive international economic environment is also essential, as developing countries are excessively vulnerable to external shocks such as sharp declines in terms of trade, barriers to their trade or sudden reductions in external resource flows. This places great responsibilities on the industrialized countries and on the international organizations.

The Strategy specifies certain priority aspects:

(a)Eradication of poverty and hunger;

(b)Human resource and institutional development;

(c)Population;

(d)Environment.

The Strategy warned that a surge in the tempo of development is unlikely if the flow of external resources is from the poorer to the richer countries rather than vice versa. This would make meaningless the concept of a decade of development endorsed by the international community.

A summary of the hopes and needs for international development in the last decade of the century is presented in the Strategy, which was meticulously negotiated and agreed upon by Governments in the General Assembly. None the less, its power to sway domestic policies in any country, rich or poor, depends on specific conditions. The Strategy was premised on resumed growth in the world economy. Events now unforeseen will undoubtedly put their stamp on the coming decade, but as of now, medium-term prospects do not inspire much hope for international development unless greater dynamism is injected into the world economy by more vigorous growth in the industrialized countries whose markets still dominate in world trade.

International markets and demand will also be increasingly affected by the rate of expansion in the newly industrializing countries and by the demographic growth of other large countries in the South. The growth poles emerging in the expansive developing countries in Asia will in the future provide an increasing share of the stimulus to world development. But the role of the industrial countries in world finance will remain preponderant for a long time and the policies they follow in their domestic affairs will, in the increasingly globalized capital markets, be of decisive importance for the rest of the world.

## Policy consensus and paralysis

The International Development Strategy constitutes an agenda against which development in the 1990s will be measured. The preoccupation with recent events in the Gulf and Eastern Europe may have temporarily diverted attention from international development, but two elements of the new world situation should facilitate the implementation of the Strategy.

First, there is a new convergence on views regarding the management of the economy, in particular the need to heed market signals in resource allocation and the crucial role of sound macroeconomic management. Second, in spite of the crisis in the Gulf a trend towards reduction in military expenditures is already evident, and this will release considerable resources.

Efforts to make economies more responsive to market signals will not produce immediate results. In particular, many developing countries, characterized by structural rigidities and low factor mobility will need time to reap the benefits of such efforts. Sound macroeconomic management - fiscal, monetary, exchange rate policies - remain critical, but there is much less agreement on what constitutes a sustainable fiscal or current account deficit and an appropriate level for interest rates, as witnessed by the difficulties encountered by the Group of Seven in coordinating policies. Likewise, key questions remain regarding the trade-off between employment and inflation and, at the international level, the responsibilities of deficit and surplus countries.

While the debate on these issues continues, in the course of the last decade or so there has been a major change in the approach to economic policy in the industrialized countries. It is too general to be ascribed to any one Government. Its roots go back to the debilitating experience of stagflation in the late 1970s and early 1980s, and to the reaction against the growth of and excessive size of the public sector.

It has also coincided with a new political economy founded both in a growing aversion to government intervention in macroeconomic affairs and in theoretical doubts about the effectiveness of such intervention in the face of rational expectations about government policies. Whereas the earlier post-war consensus had relied heavily on fiscal policy as a counter-cyclical instrument for demand management and the maintenance of high or "full" employment, the thrust is now for a reduction of the fiscal pressure and the public sector, and attempts to keep unemployment low are regarded as both futile and inflationary. Monetary restraint is relied upon to contain inflationary domestic demand and to do so with the firmness necessary to establish credibility and break inflationary expectations. This has been expected to lay the foundations for steady non-inflationary growth.

Such policies have been successful in restraining inflation, but interest rates and unemployment have been high, while investment and growth have been weaker than in previous decades. Passive fiscal policy has been accompanied by an increasing polarization in the distribution of income and wealth, reversing previous trends.

There are two forces that appear to have set a ceiling of 2-3 per cent on the growth of developed market economies. Population trends are such that, even with comparatively modest growth rates, per capita incomes will still increase by 1.5 to 2.5 per cent a year. While a ceiling of 2-3 per cent might seem low in historic terms, and in earlier periods would have had profound domestic political repercussions, more recent political and demographic developments suggest that low growth rates in themselves are not seen as so important. The emphasis lies on the quality of life, on the narrowing of inter-regional economic differences and on protection of the environment more than on higher growth of gross domestic product.

Moreover, the monetary authorities in the United States and other countries seem now convinced that output growth over 2-3 per cent a year would be inflationary and must be restrained. This view is not uncontested, but as long as it prevails, it also follows that the industrialized countries cannot serve their historic role as an engine of growth in the world economy. In low-income countries, population alone is growing at that rate.

In the present recession, Governments have been inclined to wait for a spontaneous recovery, generally cutting spending and drawing down public service, detracting from demand rather than stimulating it. Sometimes there is even talk of the benefits of recessions in restraining inflation, especially if it is expected to be of short duration, as has indeed been the case in earlier recessions. However, downward risks today are higher since in some respects the present situation is different, most notably in the heavy indebtedness of corporations and individuals in many countries. Although inflation for goods and services produced has been successfully restrained, asset inflation has been rampant in the 1980s. As asset prices begin to flag, this process becomes precarious, banks become nore cautious and bankruptcies of debtors multiply. Such a climate is not favourable to recovery, especially not a strong one.

Is the present policy mix in most industrial countries a necessary response to the ways in which their economies function, or is it an expression of political priorities according to which unemployment is an acceptable price for the containment of inflation, and high real rates of interest are welcomed even at the expense of growth at least in the short-term? If the latter is the case, the more dynamic international economic environment required for a less protracted adjustment in so many developing countries and a less costly transition process in Eastern Europe and the Soviet Union will fail to materialize in the first half of the 1990s.

If the annual rate of output growth in the Organization for Economic Co-operation and Development (OECD) could be raised by 1 per cent and exceed the perceived ceiling of 2-3 per cent without untoward consequences, their GDP would be some $150 billion higher each year, helping to meet their own social problems as well as the needs of international development, reconstruction in Eastern Europe and the protection of the environment. More robust growth might not encompass all aspirations, but the present prosperity of developed market economies was built on it and its future significance cannot be dismissed.

For the strategies of the countries in Africa, Asia and Latin America it will make an even greater difference. Unless growth in the old industrialized countries accelerates beyond present expectations, the reorientation of developing countries towards the new growth poles in the world economy will become a matter of urgency. Whatever their own efforts, international development is not imaginable without expanding markets and financial resources.

# Chapter II

## TRENDS IN GLOBAL OUTPUT AND POLICIES

Political changes and military conflicts, of which the Gulf crisis was the most spectacular example, affected growth of output in many countries in 1990. In some countries, the impact of the Gulf crisis was direct and devastating. For many others, it increased their economic difficulties, reduced growth and dimmed growth prospects. For the world economy the immediate impact of the crisis was minor but it was a grim reminder of the vulnerability of the economy to external shocks. In Eastern Europe and the Soviet Union the dramatic political changes that began in 1989 had an overwhelming impact on the growth of output in 1990. In a number of countries in Africa civil wars and famines made the goal of economic growth largely irrelevant.

In West Asia, the Gulf crisis took a large toll in human life and well-being in 1990, and output in Iraq, Jordan and Kuwait was about halved in the second half of the year. The crisis also resulted in the loss of livelihood for hundreds of thousands of migrant workers from other, much poorer, regions which also lost billions of dollars in foreign exchange earnings from workers' remittances.

The political upheavals in Eastern Europe in 1989 set in motion a transition from central planning towards a market-oriented economy. But with the machinery of central planning dismantled, and the institutional and legal framework of a market economy not yet in place, output has stagnated or declined, in some cases sharply. In the Soviet Union, ethnic tension and the redistribution of power between the central Government and the republics have aggravated the problems of transition and contributed to economic decline.

For a large number of people in other regions of the world, the goal of economic growth was not within reach. Civil wars and famines made economic survival rather than national growth the overriding objective in at least half a dozen countries, mostly in Africa.

Nonetheless, a significant number of countries, both developed and developing, continued to grow in 1990, largely unhindered by the Gulf crisis and political turmoil. Some of the largest developed market economies maintained their high rates of growth of 1989. In a number of Asian countries, output increased as fast as before, in some cases near record rates. In other countries stagnation and decline were rooted in failures of policies and structural weaknesses.

The Gulf crisis erupted when the world economy was already showing signs of weakening, and its direct impact on the growth of the global economy in 1990 is difficult to separate from other influences. The loss of output in Iraq and Kuwait and some of the other countries with strong economic links with them was large but did not make much of a dent in world output. Higher oil prices reduced real income in oil importing countries, while their inflationary potential led most developed market economies to persist with restrictive monetary policies in the face of weakening economic growth. The rise in oil prices was, however, relatively modest and its short-term effect was probably to reduce the growth of world output by no more than 0.2 percentage points. The indirect impact of the Gulf crisis was probably more important; the prospect of a prolonged and destructive war contributed to increased uncertainty about the future and weakened consumer and business confidence.

In early 1991 global output was stagnating but showed signs of recovery. For the year as a whole, it appeared set to grow at the same low rate as in 1990, with great diversity of trends among countries.

### Growth of world output: pervasive decline and diversity of experience

The growth of world output slowed in 1990 to only about 1 per cent. It was the second consecutive year of decline from 3.0 per cent in 1989 and 4.3 per cent in 1988 (table II.1). The slowdown was particularly sharp in the second half of 1990, and further worsening is forecast for 1991.

In all major country groups output in 1990 increased more slowly than before or declined absolutely. The number of people in countries, other than the developed market economies, where per capita income declined, rose from around 700 million in 1989 to 1,000 million in 1990, or nearly a fifth of world population. With the slow-down of growth, unemployment increased almost everywhere. Substantial unemployment began to characterize the economies of Eastern Europe and the Soviet Union, and in many developing countries, especially in Latin America, unemployment and underemployment worsened as output stagnated or declined.

Rates of growth as well as the causes of slow-down differed widely. Among the major developed market economies the slow-down in 1990 was most pronounced in Canada, the United Kingdom and the United States. Germany and Japan grew faster than in 1989. Almost all major economies were in or near recession by the end of the year but their growth paths differed, which imparted a degree of stability to the international economy. While the United States economy was already slowing down sharply in the second half of 1989, the German and the Japanese economies had been growing vigorously and did not show any sign of slow- down till late 1990.

South and East Asia continued to grow as fast as in 1989, though at a significantly slower pace than in 1988; this remained the fastest growing region in the world. Within the region the rate of growth varied between 2.5 per cent and nearly 10 per cent. In China, where a sharp deceleration had been brought about in 1989 because the economy was growing too fast, output increased by 5 per cent as in the previous year. In Latin America, on the other hand, output declined after having barely grown in 1989. Much of the decline was due to the contraction in Argentina and Brazil but growth slowed down in most other economies as well, partly as a result of stabilization policies and partly owing to the slow-down in North America. Country experiences varied from a rate of growth of 4.5 per cent to a de-

Table II.1. Growth of population and output, by region, 1981-1992

| | Population 1990 (millions) | Populatio growth rate (annual percentage) | Gross domestic product (billions of 1980 dollars) | Rates of change of gross domestic product (annual percentage) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1981-1987 | 1988 | 1989 | 1990[a] | 1991[b] | 1992[b] |
| World | 5 292 | 1.8 | ... | 2.6 | 4.3 | 3.0 | 1.0 | 0.0 | 2.1 |
| Developed market economies | 813 | 0.6 | 7 640 | 2.4 | 4.3 | 3.3 | 2.4 | 1.4 | 3.0 |
| North America | 276 | 0.8 | 2 866 | 2.8 | 4.4 | 2.5 | 1.0 | 1.0 | 3.1 |
| Western Europe | 358 | 0.2 | 3 467 | 1.8 | 3.8 | 3.4 | 2.7 | 1.2 | 2.3 |
| Developed Asia | 144 | 0.5 | 1 060 | 3.8 | 5.4 | 4.6 | 5.0 | 3.1 | 4.1 |
| Eastern Europe and the Soviet Union[c] | 405 | 0.6 | ... | 2.7 | 3.7 | 1.4 | –6.3 | –9.5 | –4.5 |
| Developing countries | 4 074 | 2.1 | 2 780 | 3.0 | 5.0 | 3.4 | 2.9 | 3.5 | 5.0 |
| Western hemisphere | 432 | 2.1 | 815 | 1.2 | 0.8 | 1.1 | –0.7 | 1.5 | 3.0 |
| Africa | 606 | 3.1 | 336 | 1.2 | 2.1 | 3.3 | 3.4 | 3.0 | 3.0 |
| West Asia | 130 | 3.0 | 357 | –1.6 | 1.1 | 2.4 | 0.0 | -0.5 | 7.0 |
| South and East Asia | 1 686 | 2.2 | 662 | 5.3 | 8.7 | 6.0 | 6.1 | 5.5 | 6.0 |
| China[c] | 1 139 | 1.5 | 470 | 10.0 | 11.3 | 3.3 | 4.8 | 5.5 | 6.0 |
| Mediterranean | 81 | 1.5 | 141 | 3.2 | 1.4 | 1.0 | -0.7 | 2.0 | 4.0 |
| Memorandum items: | | | | | | | | | |
| Heavily indebted countries | 612 | 2.3 | | 1.0 | 1.2 | 1.5 | –0.8 | 1.5 | ... |
| Sub-Saharan Africa[d] | 383 | 3.2 | | 1.4 | 3.0 | 2.7 | 1.9 | 3.0 | ... |

*Source:* UN/DIESA. Data on population growth rates are those published by the Department in *World Population Prospects, Estimates and Projections, as assessed in 1984* (United Nations publication Sales No. E.86.XIII.3).

[a] Preliminary estimates.

[b] Forecast, based on project LINK and Secretariat estimates. For the groups of developing countries, estimates are rounded to the nearest half percentage point. Eastern Europe and the Soviet Union excludes former German Democratic Republic, which is included in Western Europe; there is therefore a break in the series after 1990 for the developed market economies and Eastern Europe and the Soviet Union .

[c] Net material product; data for 1981-1989 are government estimates.

[d] Excluding Nigeria.

cline of 5.5 per cent. In Africa, the rate of growth improved somewhat but was barely enough to keep per capita output from falling. Among the Mediterranean countries, output declined sharply in Yugoslavia but increased in Turkey.

In Eastern Europe output in Poland and Romania fell by over 15 per centwhile in Czechoslovakia and Hungary the decline was around 3 per cent. The Soviet Union, sharing some of the problems of Eastern Europe but differing significantly in other respects, experienced a 4 per cent fall in output according to official data.

## The developed market economies

### The slide toward recession

The growth of the developed market economies slowed in 1990 by one percentage point to 2.4 per cent (see table A.2). Most of that growth, however, occurred in the beginning of the year (see table II.2).[1] By the fourth quarter, the aggregate output of the seven major developed market economies - the Group of Seven - was actually falling for the first time since 1982. Their unemployment rate was beginning to rise, especially in Canada, the United Kingdom and the United States (see box II.1).[2] Some economies fared markedly worse than others. Among the Group of Seven, Canada, France, the United Kingdom and the United

[1] In particular, the first quarter growth of Germany was a remarkable 15 per cent expressed at an annual rate (the rate of growth that would result if the one-quarter change had continued for a full year). The growth was caused by a very large surge in consumer and investment demand, stimulated mainly by the rapid influx of large numbers of immigrants and ethnic Germans (see *Monthly Report of the Deutsche Bundesbank*, June 1990 pp. 27-30).

[2] The average annual unemployment rate in the developed market economies ended a seven-year decline in 1990, averaging 6 per cent, the same rate as the previous year (see table A.8). The rate was not higher in the face of recession mainly because the economic deceleration began too late in the year for the year-long unemployment average to be raised significantly.

Table II.2. Output, unemployment and inflation in seven major industrial economies, 1989-1990

| | Quarter | | | | | | | | Year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1989 | | | | 1990 | | | | | |
| | I | II | III | IV | I | II | III | IV[a] | 1989 | 1990 |
| | *Growth of gross domestic product*[b] | | | | | | | | | |
| Canada | 5.0 | 1.4 | 3.2 | 2.1 | 2.1 | -1.0 | -1.0 | -4.0 | 2.9 | 0.9 |
| France | 5.6 | 3.3 | 2.2 | 2.9 | 3.2 | 0.3 | 5.0 | -1.6 | 3.6 | 2.4 |
| Germany[c] | 9.5 | 0.7 | -1.4 | 4.0 | 15.4 | -3.4 | 6.7 | 2.2 | 3.9 | 4.6 |
| Italy | 3.3 | 3.2 | 2.5 | 2.8 | 3.5 | -1.7 | 2.8 | .. | 3.2 | 2.2 |
| Japanc | 4.6 | 0.0 | 9.9 | 5.4 | 6.4 | 5.6 | 4.2 | 2.1 | 4.7 | 5.6 |
| United Kingdom | 2.1 | 0.0 | 2.1 | 2.4 | 2.8 | 2.4 | -5.0 | 3.6 | 2.1 | 1.0 |
| United States[c] | 3.6 | 1.4 | 1.8 | 0.4 | 1.8 | 0.3 | 1.4 | -1.6 | 2.5 | 1.0 |
| Total | 4.7 | 1.1 | 3.6 | 1.7 | 4.6 | 0.7 | 1.8 | -0.5 | 3.2 | 2.5 |
| | *Unemployment*[d] | | | | | | | | | |
| Canada | 7.5 | 7.5 | 7.4 | 7.6 | 7.5 | 7.4 | 8.1 | 9.0 | 7.5 | 8.1 |
| France | 9.6 | 9.5 | 9.4 | 9.2 | 9.0 | 8.9 | 8.9 | 8.9 | 9.4 | 8.9 |
| Germany | 5.7 | 5.7 | 5.5 | 5.5 | 5.3 | 5.2 | 5.1 | 4.8 | 5.6 | 5.1 |
| Italy | 11.0 | 11.0 | 11.1 | 10.6 | 10.1 | 9.7 | 9.8 | 9.8 | 10.9 | 9.9 |
| Japan | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 |
| United Kingdom | 7.5 | 7.1 | 6.7 | 6.4 | 6.2 | 6.2 | 6.3 | 6.8 | 6.9 | 6.4 |
| United States | 5.1 | 5.2 | 5.2 | 5.3 | 5.2 | 5.2 | 5.5 | 5.8 | 5.2 | 5.5 |
| Total | 5.8 | 5.7 | 5.7 | 5.6 | 5.4 | 5.4 | 5.6 | 5.7 | 5.7 | 5.6 |
| | *Consumer price increases*[e] | | | | | | | | | |
| Canada | 4.5 | 5.0 | 5.3 | 5.1 | 5.3 | 4.6 | 4.2 | 5.0 | 5.0 | 4.8 |
| France | 3.5 | 3.6 | 3.4 | 3.6 | 3.3 | 3.1 | 3.5 | 3.6 | 3.5 | 3.4 |
| Germany | 2.5 | 2.9 | 2.8 | 2.9 | 2.7 | 2.3 | 2.7 | 3.1 | 2.8 | 2.7 |
| Italy | 5.9 | 6.5 | 6.4 | 6.3 | 6.4 | 6.1 | 6.5 | 6.8 | 6.3 | 6.4 |
| Japan | 1.1 | 2.8 | 2.7 | 2.6 | 3.3 | 2.4 | 2.8 | 3.9 | 2.3 | 3.2 |
| United Kingdom | 7.8 | 8.2 | 7.7 | 7.8 | 7.8 | 9.6 | 10.4 | 9.9 | 7.8 | 9.5 |
| United States | 4.8 | 5.2 | 4.7 | 4.7 | 5.2 | 4.6 | 5.5 | 6.2 | 4.8 | 5.4 |
| Total | 4.2 | 4.8 | 4.5 | 4.5 | 4.8 | 4.4 | 5.1 | 5.7 | 4.4 | 5.0 |

*Source:* UN/DIESA, based on data of IMF, OECD and national authorities.

[a] Partly estimated.

[b] Percentage change in seasonally adjusted data from preceding quarter, expressed at annual rate.

[c] Gross national product.

[d] Percentage of total labour force; seasonally adjusted data as standardized by OECD.

[e] Percentage change in average consumer price index in quarter relative to same quarter of preceding year.

States ended 1990 with output declining, while Germany[3] and Japan continued to grow, albeit at much reduced rates.

The smaller economies slowed down more in 1990 than the larger ones, especially Australia, New Zealand, Finland, Greece and Sweden. In other small economies, however, GDP grew by 3 per cent or more, namely in Austria, Belgium, Ireland, the Netherlands, Portugal and Spain.

The difference in growth performance among the developed market economies was greater than in recent years, mainly due to divergencies in monetary management, the unification of Germany, a trend of fiscal consolidation and, as will be noted below, a wave of investment in Japan.

Inflation in developed market economies as a group rose by more than half a percentage point to 5.5 per cent in 1990 (see table A.7), partly because of the surge in oil prices following the start of the Gulf crisis. Between the end of July and the end of August of last year, world average spot prices for crude petroleum jumped by over 60 per cent and by the end of September, the peak month, they had risen by another 35 per cent. However, the effect of this was mitigated in countries where exchange rates rose relative to the dollar, notably Japan and the countries

[3] Through accession of the German Democratic Republic to the Federal Republic of Germany with effect from 3 October 1990, the two German States united to form one sovereign State. Since they were separate entities for most of the year, however, the two German economies in 1990 are discussed separately in this Survey. Information on the former German Democratic Republic is included in the section "Economies in transition" below. In the present section, "Germany" refers to the former Federal Republic.

### Box II.1. Rising unemployment in developed market economies

Unemployment fell from the mid-1980s in almost all developed market economies. However, recession spread in 1990 and continues into 1991. In the United States, unemployment in mid-1990 was at the lowest rate in recent years, 5.3 per cent of the labour force, about the same as it had been for over a year. But by year-end, it had risen to 6 per cent, and by February 1991 to 6.5 per cent. The unemployment rate in the United Kingdom in early 1991 was up about one percentage point over a year earlier, while it was up about two percentage points in Australia and Canada.

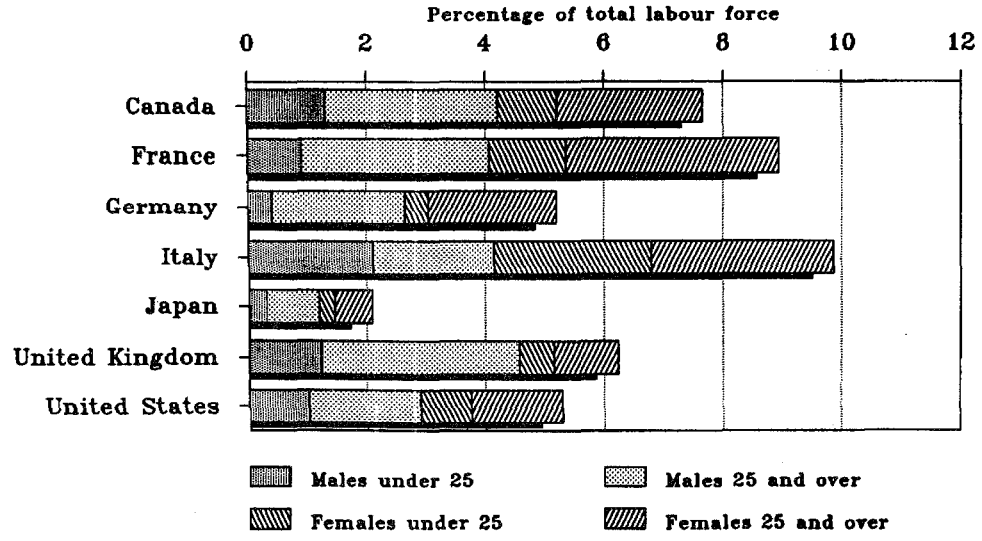
Some minimal rate of unemployment is necessary and natural in any modern economy as workers change jobs, new workers enter the labour force at a faster rate than others leave, some firms close, others open. But in most industrial economies, except perhaps Japan, the unemployment rate now exceeds the "frictional" unemployment. The challenge is to provide job opportunities for the "excess" population through training, job-search assistance, and breaking down social barriers to hiring people, particularly the barriers based on sex and race. But progress is made most convincingly when economies experience steady and strong growth and the overall demand for labour rises. Growth in the late 1980s had been fairly steady, but not especially strong, again excepting Japan. Progress in reducing unemployment was thus mixed.

Countries differ in the degree of financial support of the unemployed, as well as in training and assistance in job placement. Some of the more generous benefits are accorded in countries with higher unemployment rates. But people everywhere legitimately aspire to financial self-sufficiency earned from productive, demanded work. Indeed, the inability to absorb the young into the labour force in the 1980s has been a continuing policy preoccupation. The dimensions of the problem are dramatic, most especially in Italy (see figure).

Raising employment opportunities for women has been an objective in industrialized countries in the 1980s, as women have sought greater economic independence and families have needed to supplement their earnings in the face of falling real wages, as in Canada and the United States in most of the 1980s. In both those countries, the female unemployment rate had been falling since 1984; that trend seems now to have been broken. In France, Germany and Italy, in contrast, the female unemployment rate had not substantially improved and remained disproportionately above that for men.

If the economic weakness in the developed market economies continues, increases in unemployment and uncertainty about the duration of the recessionary conditions are likely to lead to greater pressure on policy makers to delay initiatives that are seen as risky by the working population, such as the proposed free trade area of Mexico with the United States and Canada. More intense pressures to tighten limits on immigration, as in Eastern European inflows to Western Europe, may also be expected.

Composition of unemployment in major industrial economies, first three quarters of 1990



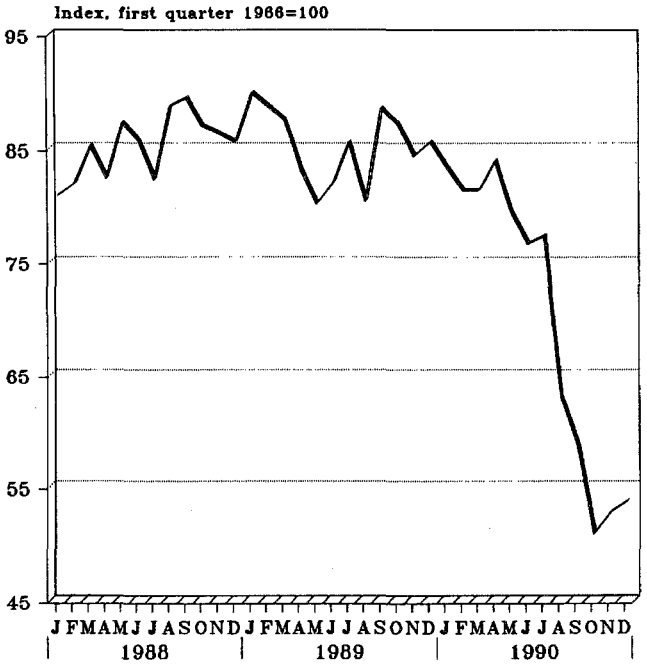

*Source:* Data of OECD, *Quarterly Labour Force Statistics*.

[a] For an analysis of the long 1980s expansion of the developed market economies, see *World Economic Survey 1990* (United Nations publication, Sales No. E.90.II.C.1), chap. VIII.

[b] In 1989, for example, the last year for which sufficiently complete data are available, the femal unemployment rate in France was 12.6 per cent compared to 7 per cent for men; it was 8 per cent versus 6 per cent in Germany and 18.6 per cent versus 8 per cent in Italy; in the United States in contrast, it was 5.3 per cent for women versus 5.1 per cent for men in 1989 (data of Organisation for Economic Co-operation and Development, *Quarterly Labour Force Statistics*, 1990, No. 4).

in the Exchange Rate Mechanism (ERM) of the European Monetary System.[4] The average inflation rate among the Group of Seven in the second quarter of 1990 was 4.4 per cent (see again, table II.2). In the three months to September before the effect of higher oil prices had worked its way through the price structure, the rate of inflation rose above 5 per cent. In the fourth quarter it exceeded 5.5 per cent.

Figure II.1. Consumer expectations in the United States, 1988-1990




*Source:* Data of University of Michigan, Survey Research Center (used by permission).

Monetary policy did not accommodate the price shock, i.e., the money supply was not expanded to permit the same level of real expenditure to be undertaken at the higher prices, which put pressure on output. With so much uncertainty about the duration and severity of the "oil shock" and with the suddenness of its onset, appropriate counter-cyclical policy was difficult to design. Central banks were left to manoeuvre between weakening production sectors, rising prices and speculative currency swings. The oil price shock thus reduced the scope for loosening monetary policy as a way to respond to the economic slowdown that was already in its early stages.

Indeed, the United States economy, for one, might not have actually slipped into recession in 1990 if the Gulf crisis had not erupted. By mid-year, United States economic growth was almost nil. The stock market turned bearish, reflecting a negative business sentiment, and financial capital in general became more difficult to raise as banks turned increasingly cautious in lending. The financial-service sector had not fully recovered from the consequences of the stock market crash in October 1987 and a series of scandals and bankruptcies affected investment banks, savings and loan institutions and commercial banks. In a weakened state, a cautious lending attitude seemed prudent, especially in the light of the softening property market in which banks were heavily invested. Pockets of recession thus appeared on the eastern and western coasts of the United States.

Manufacturing and agriculture in the geographical middle of the country continued to show strength, encouraged for a time by accelerated export growth. Still, declining values of property and equity shares in 1990 had produced the first decline in the level of personal wealth in the United States since 1981 and consumer spending would not have been strong even without the Gulf crisis. As it was, consumer expectations were severely shaken (see figure II.1), which sharply reduced spending on consumer durables and housing construction and brought about the decline in economic activity in the fourth quarter of the year.

In contrast, two economies maintained a significant if declining growth throughout the year, namely Germany and Japan. Their key sources of growth were the unification of the two German republics and the restructuring of the capital stock in Japan.

The German economy received a large injection of consumer spending from the currency union on 1 July 1990. Retail sales in the three months following currency union rose by 33 per cent over the previous quarter, as residents of the eastern *Länder* spent their windfall from the conversion of the ostmark to the deutsche mark. Although the spending boom was short, stronger long-term expectations stimulated new investment demand as the economy had little excess capacity. Furthermore, additional official expenditures engendered by the political union pushed the Bonn Government in a more expansionary fiscal direction. The central Government budgetary balance, which had been in surplus at an average level of 1 per cent of GNP in the second half of the 1980s, dropped in 1990 to a deficit of about 2.5 per cent of GNP.[5] Thus, increased consumer spending, Government spending and investment spending produced an annual rate of growth of almost 5 per cent in 1990 despite a tight monetary situation.

In Japan, fixed capital formation has been the main source of growth; the investment ratio has been the highest of the major developed countries (see table A.5). The reason for the high rate of capital formation is that the Japanese industrial sector is in the midst of a major restructuring of the capital stock.

The restructuring has been brought about by three developments. First, the tightening Japanese labour market is inducing firms to seek more labour-saving technologies. Second, the pace of technological innovation is so rapid in Japan that new investment is being driven more by competitive forces than by physical obsolescence. Finally, Japanese firms are pursuing *Jōhō-ka*, a "computer communication network" revolution, which aims

[4] With the entry of the United Kingdom in October 1990, the ERM now comprises all member countries of the European Community except Greece and Portugal (see chapter IV for recent developments in the ERM and its planned transformation into a full monetary union). Other countries whose currencies tend to follow those of the ERM include Austria and Switzerland, not to mention the francophone African countries whose currencies are linked to the French franc.

[5] The central government budget of Germany excludes social security funds and extrabudgetary accounts that are generally in substantial deficit (data of International Monetary Fund, *Government Finance Statistics and International Finance Statistics*).

at comprehensive computerized information and control systems, computer-assisted design in manufacturing and computerized distribution services (e.g., retail purchases through computer terminals). Japan's investment level was not greatly affected by the rise in the cost of credit, partly owing to the high liquidity of Japanese firms. However, the duration of the investment cycle is uncertain.

Germany and Japan have thus provided a certain offset to the weakness in the other countries. German imports, in particular, grew considerably faster than exports last year and helped to sustain areas of growth in Europe, notably in Austria and the Netherlands.

However, in both small and large European economies, the growth in aggregate demand last year was more domestic in origin than in previous years. In the case of France and Italy, which sent, respectively, 16 and 18 per cent of their exports to Germany, the surge in German demand and imports helped temper a slow-down in other exports. The major impetus to growth, however, was domestic demand. Indeed, the decline in the GDP of France in the fourth quarter of last year was mainly due to a Gulf-related fall in confidence and the discouragement given to spending by a tight monetary policy. The same negative factors operated in the fourth quarter in Japan where growth was sustained, however, by Japan's own exports, particularly to the dynamic developing countries of Asia.

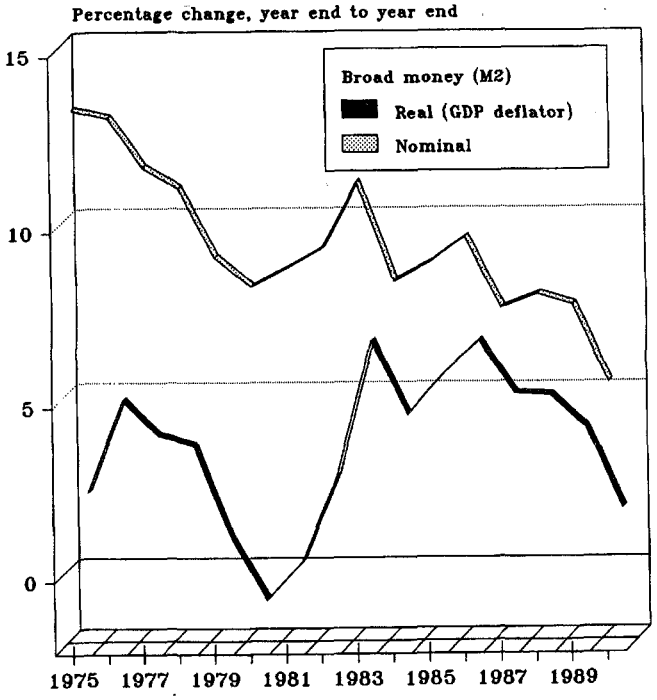
### The role of money in the slow-down

It was noted above that monetary policy in 1990 sought to contain the inflationary impulse from the oil price increase. But monetary policy would have been tight anyway for reasons that lay in developments in the 1980s. Indeed, it is a factor that will have a continuing influence after the effects of the oil price swing and consumer confidence shock have worn away.

The degree of monetary stringency in 1990 in the Group of Seven was unusually severe. The money supply, broadly defined ($M_2$) in the figure, grew at the slowest rate in the decade. In real terms, which corrects for the loss of purchasing power of money due to inflation, $M_2$ grew at the lowest rate since the 1981 recession and less than half the rate of 1989 (see figure II.2).[6]

Early in the decade, monetary policy in the major industrial countries had also turned stringent. It quashed high inflation and inflationary expectations through a sustained contraction of demand. The average rise in consumer prices in the seven major economies was reduced from 12 per cent in 1980 to 7 per cent in 1982, and then prices rose by no more than 4.6 per cent in any year until 1990. This was initially accomplished through reductions in the growth of the supply of money - and contractions in real money supply - which brought about very high interest rates (see table A.8). Subsequently, monetary policy relaxed somewhat, on average, and money supply began to grow more rapidly. With inflation reduced, the monetary expansion

Figure II.2. Money supply of the Group of Seven, 1975-1990*




*Source:* UN/DIESA, based on data of IMF, *International Financial Statistics.*

*Weighted average changes (GDP weights).

became a surge in the real availability of spending power. Thus, the broad money supply in real terms in the Group of Seven rose more than 6 per cent in 1983 and stayed in the range of 4 to 6.5 per cent to 1989 (see again, figure II.2).

The effect of monetary expansion was enhanced by policies of financial deregulation, which reduced restrictions on financial institutions and allowed the freer movement of capital across borders. Together with the development of innovative financial instruments, this served to increase the liquidity and mobility of financial capital.

With abundant money available to supply new and old credit channels, and with inflationary expectations dampened since the early 1980s recession, funds increasingly flowed into asset markets. In the five years preceding the October 1987 stock market crash, New York stocks rose by 250 per cent and Tokyo's by 285 per cent. Asset price escalation was evident also in property markets in the world's major cities.[7] Moreover, asset price

[6] The "real money supply" is defined as $M_2$ deflated by the implicit GDP deflator, the idea being to capture movements in rather inclusive measures of money and prices ($M_2$ is measured here as the stock of cash held by the public plus total demand, time, saving and foreign currency deposits, exclud ing those of the central Government; the GDP deflator is the broadest inflation measure, including the prices of all activities that enter into GDP). The data cited for the Group of Seven are weighted percentage changes in national money supplies, with weights being the GDP of the year in question valued in 1980 prices and exchange rates.

[7] While cultural and speculative motives serve to push up demand for land and structures as income and wealth grow, there are sometimes also important tax benefits to investment in real estate (on the case of Japan, see Bank of Japan, Research and Statistics Department, "The recent rise in Japan's land prices: its background and implications", Special Paper No. 193, December 1990 (translated from Japanese original in *Chosa Geppo*, April 1990)).

inflation provided the collateral for further borrowing and asset investment.

In this setting monetary policy turned restrictive. Japan's real money growth reached 11.5 per cent in 1987 and was 9 and 10 per cent in the next two years. In 1990, however, this was cut back to less than half. Canada's real money supply grew over 8 per cent in 1989 and was cut back to 1.6 per cent in 1990. In the United Kingdom, a 12 per cent rate of growth of real money in 1989 was reduced to close to 4 per cent in 1990. In France, Germany and Italy, the year-to-year changes in real money supply were less dramatic (see again, table A.8), and so were their changes in the growth of GDP.

By late 1990, there was a widespread discussion in financial circles of a "credit crunch" and a concern, as the major industrial countries headed for recession, whether monetary authorities were not overly stringent. On the other hand, it is now widely agreed that inflation, once started, is costly to squeeze out of an economy because inflationary expectations tend to persist until people again believe in the anti-inflationary determination of policy makers.[8]

Within the European Monetary System, member countries have tended to follow the priorities set by the Deutsche Bundesbank, the central bank of Germany, whose strong aversion to inflation had made it an anchor for the other authorities. They had to follow the policy lead of the largest economy if they were to maintain the exchange rate parities in the ERM. A significantly more expansionary increase in money in one country would lower its interest rates and send financial resources surging to the higher interest partners, depressing the exchange rate. In 1990, the region's central banks thus sought to maintain a tight hold on their money supplies.

The pressure for expansion on the Bundesbank was great, as it had to absorb the formation of the Federal Republic's currency union with the German Democratic Republic. By year end, expanded budgetary outlays for the union - and Germany's share of the cost of meeting the Gulf crisis - was emerging as a destabilizing threat, prompting the Bundesbank to raise interest rates in January 1991 (quickly followed by monetary tightening in Austria and the Netherlands). By February, however, the German Government prepared a new tax package and monetary easing during the year became more of a possibility.

The Bank of Japan was particularly aggressive when it turned restrictive in 1989. Its discount rate - the interest rate charged banks that borrow from the central bank - had been 2.5 per cent in May 1989; it was raised to 6 per cent by the end of 1990. The Bank of Japan was motivated by two concerns. First, as elsewhere, the spiral of asset-price increases and expanded borrowing had begun to produce inflation in goods markets. Second, the Bank had become increasingly concerned over the fragility of over-inflated financial markets. It became the explicit policy of the central bank to coax financial and property markets downwards, in an attempt to avert an outright collapse. As a result, the Nikkei index of stock prices fell 39 per cent by the end of 1990 from its 1989 high.

Credit tightening also put a brake on rising property prices which exacerbated the concern about the robustness of the financial institutions. The same was seen in the United States where there is considerable concern about the fragility of financial institutions, especially in the light of the very widespread bankruptcies in the savings and loan sector.[9] Equity markets outside Japan were also victims of the credit contraction, but only a few (Spain, Sweden) adjusted deeply. In the United Kingdom, financial sector deregulation policies spurred the growth of borrowing. The Supplementary Special Deposits Scheme that had limited commercial bank lending was abolished in 1980, and banks began to enter the housing loan market. The breakdown of the building societies cartel led to more competitive interest rates and a build-up of consumer debt. This was intensified when the 1986 Building Society Act allowed mortgage lending for non-housing uses at lower interest rates than had been available before to consumers. Credit expanded and rising property values became the basis of additional increases in consumer borrowing.

The ratio of net savings to personal disposable income fell from 10 per cent in 1979 to less than 3 per cent in 1989. The ratio of debt to income in the personal sector rose from 50 per cent to over 100 per cent in the same period. The corporate sector also became heavily indebted, with net borrowing of the non- personal private sector reaching £24 billion (5 per cent of GDP) in 1990.

The credit-fueled surge in demand was given a fiscal boost by the budget of 1988 (for fiscal year, April 1988 to March 1989), which cut the higher rate of income tax from 60 per cent to 40 per cent. The consequent £3 billion net fiscal injection was multiplied by credit raised on the higher disposable income base. On the strength of the surge in demand and thus in tax revenues, the budget reached a surplus of almost £15 billion in 1988, although fiscal policy had been eased.

The combination of monetary and fiscal laxity led to an increase in the rate of inflation, which in 1989 became the highest among the Group of Seven. The Bank of England began to tighten monetary policy in 1988 and again in 1989, but the growth of M2 did not slow seriously until 1990. With the inflationary momentum continuing, inflation reached 10 per cent last year, and British borrowers paid the highest nominal interest rates of the major developed economies. In the third quarter of the year, output declined at an annual rate of 5 per cent, owing to cut-backs in the spending of highly leveraged consumers. Meanwhile, the recession eliminated the budget surplus and a fiscal deficit of almost £10 billion is anticipated for fiscal 1991/92.

In Canada, inflation in 1989 was 5 per cent, the highest since 1983. In 1990, the Bank of Canada pushed short-term interest rates up to more than 13 per cent, 5 percentage points higher than in the United States The economy promptly declined by 1 per cent in the second quarter.

Two conclusions emerge from the experiences outlined here. First, active macroeconomic management in the major indus-

[8] See, for example, Tim Jenkinson, "The assessment: inflation policy", *Oxford Review of Economic Policy*, vol. 6, No. 4 (winter 1990), pp. 1-14.

[9] See the discussion of United States budgetary developments in the section below.

trial countries has been primarily undertaken by the monetary authorities. Second, the primary focus of the policy makers has been on containing inflation, at the expense, when necessary, of incomes, employment and growth.[10]

**What happened to fiscal policy?**

In the not so recent past, conventional thinking about economic policy was that in a period of recession, the Government should raise expenditures or reduce tax rates to boost aggregate demand and steer the economy back towards high employment and economic growth. Fiscal policy was to operate in conjunction with monetary policy and with attention to the impact of the combined policy package on inflation and the foreign exchange rate. In the current downturn, however, it is hard to find proponents of an activist fiscal policy.

Part of the reason is that the recession began only recently and is for the most part not yet of major proportions. Also, the anti-inflationary concerns that motivated the tightening of monetary policy as discussed above have not been fully laid to rest. It would be difficult to get agreement in policy-making circles in any of the major countries on the degree of fiscal stimulus that would be appropriate. Indeed, the uncertainties engendered by the Gulf crisis made forecasting the duration and severity of the cycle impossible.

Even if there were a consensus forecast on which to base fiscal policy, as long as the outlook were for a short recession it is doubtful that fiscal policy would be brought into play, as it is not regarded as an instrument for "fine tuning" economic growth. Although legislatures have the power to act quickly, the politics of changing taxation and government expenditure are generally complicated and time consuming. If a fiscal stimulus only becomes effective after recovery is under way, it might destabilize the economy instead of smoothing out the business cycle.[11]

A further limitation of activist fiscal policy is that what matters from the macroeconomic perspective is the overall impulse to the economy from the sum of government spending and taxation, but that impulse is the result of changing specific expenditure programmes that aim to meet particular national needs and specific taxes that generally have differential effects on various segments of the population. Indeed, that is why legislatures deliberate intensively on fiscal policy issues. The budget and its financing may simply be too important - or too difficult politically - to revise to fit short-term macroeconomic management needs, except in extraordinary situations. The overall fiscal situation remains a crucial policy concern, but one best controlled generally in a medium-term framework.

If fiscal policy is thus a tool best reserved for helping to manage more than minor fluctuations in economic activity, it is also a tool that is available only if the government budget position is considered sustainable. This, in particular, was a concern in Japan. In 1983, the Government of Japan set itself the goal of ending the issuance of public bonds to finance budget deficits by fiscal 1990 (April 1990 to March 1991). Indeed, no issue of deficit-financing bonds was included in the fiscal 1990 budget.[12] Net public debt fell from 27 per cent of GNP in 1984 to 10 per cent in 1990.[13] In the budget for the current fiscal year, no issue of bonds for deficit financing is planned for the second consecutive year.[14]

A major reason for reducing the relative size of public debt in Japan was to lower the burden of budgetary interest payments and thereby increase the ability of the Government to engage in active fiscal policy when needed. Policy in this regard is quite explicit:

> "...fiscal policy management must be aimed at reconciling fiscal consolidation and domestic demand expansion...[and] an effort should be made for flexible and appropriate management in keeping with changing economic conditions".[15]

This did not mean, however, that the budget would be the tool of choice for macroeconomic fine tuning; the latter was discussed under the heading of monetary policy. Rather, policy makers were focusing on the use of fiscal policy to change the composition of aggregate demand by allocating and redistributing resources. The Government intends to transform the economy into one that is led more by domestic demand than export growth and thereby reduce Japan's external surplus. It is concerned about the ageing of the Japanese population and the condition of the country's social and economic infrastructure. These all require substantial public investment and, indeed, new long-term targets for such spending were announced last summer in the context of the Structural Impediments Initiative, a set of bilateral talks with the United States Government.[16]

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10 An additional factor not explicitly discussed here makes the matter even more complicated, namely, a decade of institutional developments in the financial sector is altering how monetary policy works, how powerfully it affects spending and with what lags (see Paul Bennett, "The influence of financial changes on interest rates and monetary policy: a review of recent evidence", Federal Reserve Bank of New York, *Quarterly Review* (summer 1990), pp. 8-30; and Barry Bosworth, "Institu tional change and the efficacy of monetary policy", *Brookings Papers on Economic Activity*, No. 1, (1989), pp. 77-124).

11 An argument popular in some academic circles is that fiscal policy will not work in any event because people are smart enough to realize that a fiscal stimulus raises government debt and future tax liabilities and thus, to protect future consumption plans, taxpayers will increase their current savings, offsetting the fiscal stimulus. Without rejecting the hypothesis that people generally act intelligently and in their own interest, experience seems to show that fiscal policies do have potency (for the case against fiscal policy and a rejoinder, see Robert J. Barro, "The Ricardian approach to budget deficits", and B. Douglas Bernheim, "A neoclassical perspective on budget deficits", both in *Journal of Economic Perspectives*, vol. 3, No. 2 (spring 1989), pp. 37-54 and 55-72).

12 There is one qualification. Japan's $9 billion contribution toward expenses related to the Gulf crisis was to be financed by the issuance of bonds which were deemed to fall under the 1990/91 budget.

13 Net debt here is the debt of general government (i.e., including social insurance and local government accounts as well as the budgetary central Government) minus general government assets, as per *OECD Economic Outlook*, No. 48 (December 1990), table 35).

14 Bonds will still be issued to finance construction expenditures, but they are to be a diminishing share of total fiscal revenues.

15 Government of Japan, Economic Planning Agency, *Economic Management Within a Global Context* (adopted as the policy for economic management for the period extending from fiscal 1988 to fiscal 1992, 27 May 1988), part III, chap. 8, sect. 1(3).

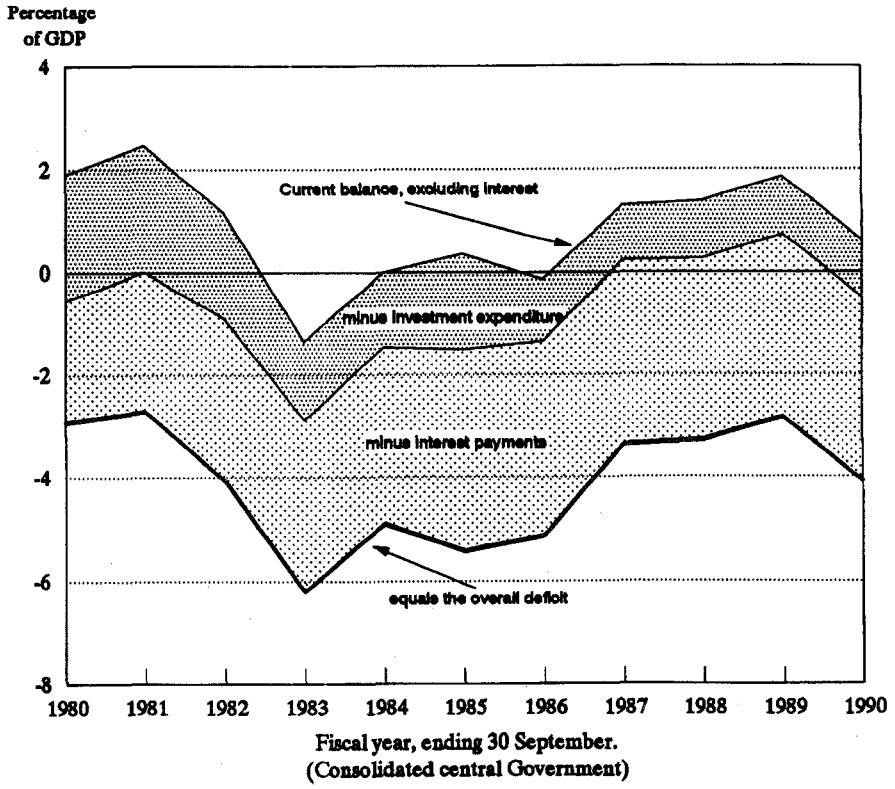
16 Specifically, under the Basic Plan for Public Investment, the Govern ment intends to raise public investment spending in the period 1991-2000 by 63 per cent over spending during 1981-1990 and raise the share of "quality-of-life" investments to 60 per cent from about 50 per cent (Government of Japan, *Final Report of the United States-Japan Structural Impediments Initiative Talks* (in Japanese), 28 June 1990).

The United States itself is in a medium-term process of consolidating its fiscal deficit, but the deficit nevertheless still remains so large as to preclude any consideration of counter-cyclical fiscal stimuli except in the most dire emergencies.[17] The budget deficit of the Federal Government reached $220 billion in 1990 and was projected by the Administration at $318 billion in 1991.[18] These deficits come after a decade in which the Government added twice as much to the national debt as had been accumulated in the entire 200-year history of the country, the debt rising from $747 billion at the end of fiscal 1980 to $2.4 trillion at the end of fiscal 1990, from 29 per cent of GDP to 45 per cent.[19]

Last year, however, saw the first significant deterioration in the federal fiscal balance since the 1986 Tax Reform Act began to correct the policy errors of the taxation and spending programmes of the early 1980s (see figure II.3). The increase in the 1990 deficit and that expected for 1991 are partly attributable to the slow-down in United States economic growth, as tax revenues are adversely affected and certain spending categories rise during recessionary periods, such as unemployment assistance and income support. But, these amounts are relatively small: $5 billion in 1990 and $37 billion in 1991 according to Government estimates.

The major cause of the renewed growth of the deficit is the increase in outlays for bank deposit insurance, part of the ongoing effort to deal with the widespread bankruptcies in the banking industry, especially but not exclusively in the savings and loan sector. Although the economic slow-down has aggravated the banking crisis, its roots are structural.[20] The United States financial sector has been changing since the 1970s, with new institutions coming to compete with banks and thrifts in their traditional activities, namely, lending to businesses and lending for home mortgages, respectively. The most creditworthy corporate customers of banks could with increasing ease borrow directly on securities markets (e.g., issuing commercial paper in lieu of taking short-term bank loans) or from foreign banks. The banks

Figure II.3. Composition of United States Government fiscal balance, 1980-1990




*Source:* UN/DIESA, based on data of IMF, *Government Finance Statistics.*
(1990 estimated from United States Treasury data).

17 The decision-making unit for fiscal policy is the central government which, because of the large economic role of the states under the United States federal system, differs consider ably from "general government" in national income and government finance statistics. State and local governments, however, like the central Government, have been under very considerable budgetary pressure in recent years (see Laura S. Rubin, "The current fiscal situation in state and local governments", Federal Reserve Bulletin (December 1990), pp. 1009-1018).

18 Including $8 billion net for Persian Gulf military activities ($23 billion in outlays minus $15 billion of inflows under the Defense Cooperation Account). Data are for fiscal years ending 30 September, as per *Budget of the United States Government, Fiscal Year 1992* (Washington, D.C., Government Printing Office, February 1991).

19 Data for consolidated central Government, as per International Money Fund, *Government Finance Statistics.*

20 For a background on the crisis, see L. William Seidman, "Deposit insurance and banking efficiency", in Zuhayr Mikdashi, ed., *Bankers' and Public Authorities' Management of Risks* (London, Macmillan, 1990), pp. 1-15; and "The Symposium on Federal Deposit Insurance" in *Journal of Economic Perspectives,* vol. 3, No. 4 (fall 1989), pp. 3-47.

also found that supposedly low-risk loans to developing country Governments were in fact quite risky. Moreover, under competitive pressure to raise earnings to be able to pay more competitive interest rates on deposits, banks backed increasingly speculative activities, including "junk bond" financing of mergers and acquisitions and commercial real estate. In all, the riskiness of their loan portfolios rose appreciably. In the case of the thrift institutions, deregulation in the early 1980s was aimed at increasing their ability to compete in a changing financial market, but led many into highly speculative and in the end loss-making investments, as well as highly publicized instances of fraud and mismanagement.

Since deposits in the banking institutions that failed were, typically, insured by the United States Government - and large uninsured deposits in large banks were treated as if insured in order to maintain international confidence in the United States banking system - there has been a substantial drain on the resources of the deposit insurance schemes. Indeed, the Federal Savings and Loan Insurance Corporation itself became insolvent and the Federal Deposit Insurance Corporation has seen a very large drain on its resources over several years. Hence, the Government spent $58 billion on deposit insurance in fiscal 1990, was anticipating outlays of $111 billion in 1991[21] and budgeted $88 billion for fiscal 1992.[22]

This experience underlines the need for great care in financial deregulation and the overriding importance of vigilant bank supervision - indeed, it should be studied closely in developing countries contemplating their own financial deregulation. But it also highlights the practical limits to discretion in Government budget making. The United States Government is ultimately responsible for the guarantees on bank deposits and has to cover any shortages in the usually self-financing insurance funds. If this worsens the fiscal deficit, it must simply be accepted and financed through increased Government debt. The alternative would have been to raise taxes which, aside from being extremely unpopular with the electorate, would have worsened the recessionary tendencies already in the economy.

If there are short-term constraints on reducing the United States budget gap, the need to again begin doing so once macroeconomic conditions permit is incontrovertible. Indeed, after difficult negotiations the Administration and the Congress set themselves a new set of budget targets last autumn, the previous targets having become impossible to meet.[23] Meeting the new targets will depend, on the one hand, on whether the underlying economic forecasts are realized (affecting, for example, tax revenues, interest payments and the costs of Government wages and purchases), and on the other hand, on whether budgetary discipline can be maintained.

Little of United States federal expenditures is discretionary. Social insurance, including the Government's own pensions, Medicare, unemployment and other income-security measures, accounted for almost 40 per cent of total outlays in fiscal 1990. Net interest payments made up almost 15 per cent of the total last year. Without the interest bill, the United States deficit would have been eliminated in 1987, as figure II.3 shows. As the figure also indicates, Government investment has already been squeezed. It can be argued that less government investment is needed now that the interstate highway system and other large infrastructure projects are largely complete; but substantial environmental investments, not least in cleaning up some federal facilities, are needed.[24] Other increases in investment expenditure could easily be defended in education, health, civilian research and other areas. The budgetary constraint on such investment, as well as on recurrent discretionary expenditure, has been acutely felt for a decade.

The most promising area for fiscal adjustment is military expenditure. Indeed, the 1991/92 Administration budget calls for a decline in defence spending, which would lower it from 24 per cent of outlays last year to 20 per cent in 1991/92. The international security situation may permit even deeper cuts. Cuts in military expenditures, combined with appropriately phased increases in taxes beyond those already implemented, would allow the United States to reduce its deficit substantially and regain fiscal policy as a potential tool for macroeconomic stabilization.

## Economies in transition

The momentous political transformations in Eastern Europe and the Soviet Union will shape the political and economic development of the region for generations to come. In 1990 the costs of transition were much in evidence.

### Production and productivity

The drop in economic activity in the region in 1990 was the worst since the period of stabilization after the Second World War.[25] Measured in net material product (NMP), the traditional output measure used in Eastern Europe, output contracted 11 per cent in Eastern Europe and at least 4 per cent in the Soviet Union. In Czechoslovakia the contraction was mild, but in Poland and Bulgaria the recession has been on the order of 13 per cent (see figure II.4). Romania's gross output declined by almost 11 per cent and that of Hungary by over 5 per cent. In the former

21 Not including the supplemental appropriation approved by the Congress in March of this year.

22 Some of the funds allocated for deposit insurance are expected to be recouped as the assets of the failed institutions are sold, and thus the Administration foresees a net contribution to the budget from this activity beginning with $38 billion in 1994.

23 For an assessment of fiscal policy under the previous Balanced Budget Act procedure, see *OECD Economic Surveys: United States* (Paris, Organisation for Economic Co-operation and Development, November 1990), pp. 62-78.

24 *Ibid.*, pp. 82-86.

25 Quantitative economic indicators for the region must be interpreted with extreme caution. Numerous official revelations of serious problems in the statistical data have been published in several - though not all - countries, touching all areas of reporting, from physical indicators to complex measures of aggregate output and its expenditure components. While more accurate data will be published in due course, it is believed that existing data provide broad indications of the direction and orders of magnitude of current developments.

German Democratic Republic, the decline was estimated at over 13 per cent.[26]

Along with the production decline, there was a severe disruption of the distribution system. In spite of a bumper grain harvest, the USSR requested food aid from foreign donors. Empty shelves in shops, rationing and long queues were common throughout the year, particularly in Bulgaria, Romania and the Soviet Union. Unemployment, which was not measured in years past, has reached levels comparable to those of Western Europe.[27]

Recovery will require a high rate of investment, but in 1990, gross investment contracted by about 13 per cent in the Eastern European economies and by 4 per cent in the Soviet Union, according to ECE estimates (see table A.10). The biggest cutbacks were reported in Romania (35 per cent), in Bulgaria (14 per cent) and in Poland (8 per cent).

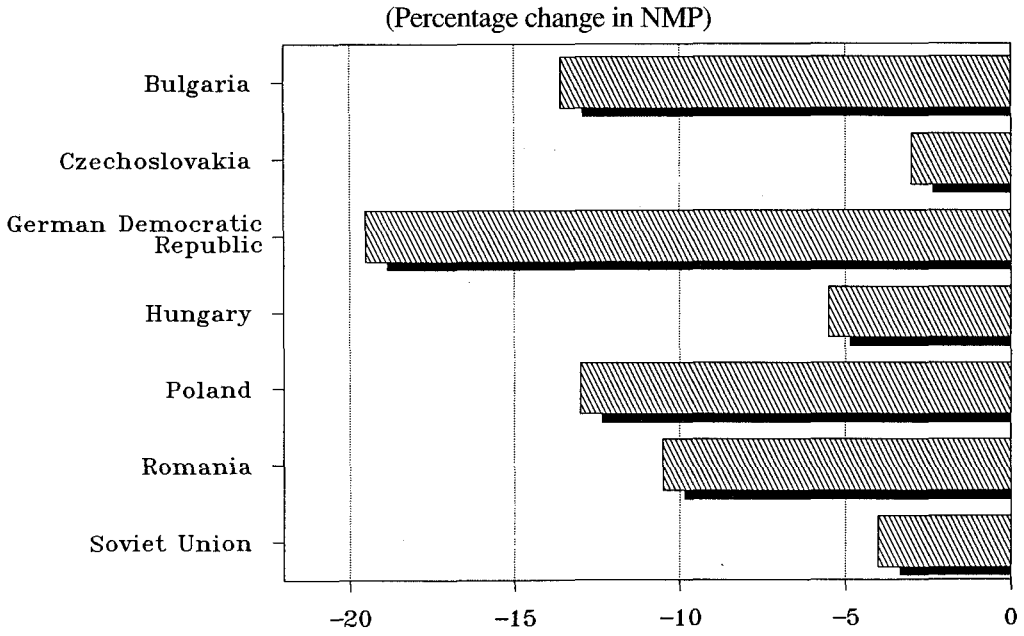
In the USSR, in particular, financing of investments shifted from mostly budgetary to enterprise financing,[28] but this did not improve investment efficiency owing to rigidities remaining in the procurement of investment goods and the administrative controls over investment activity. Central authorities have sought, none the less, to improve investment productivity by abandoning excessively capital-intensive projects in heavy industry, mostly in metallurgy and the fuel and energy sectors.

Although some private, small-scale enterprises have begun to thrive in some areas of Eastern Europe, there is little evidence yet of success in restructuring large, inefficient, State-owned enterprises.

In the USSR, the installation of new production capacity fell far short of intentions. Fulfilment of State construction contracts was an unusually low 31 per cent, and 43 per cent of industrial construction projects that were not completed in 1989 as planned were still under construction at the end of 1990. Two thirds of the facilities commissioned over the last two years were working at less than half their potential.

Industrial production was especially hard hit. It contracted in Eastern Europe as a whole by almost 20 per cent. Worst affected were the German Democratic Republic (down 28 per cent), Poland (23 per cent), Romania (20 per cent), and Bulgaria (14 per cent). Industrial production in Hungary declined by about 5 per cent, whereas in Czechoslovakia output fell 4 per cent (see table A.10). Industrial production fell by 1.2 per cent in the Soviet Union, based on official data. Several experts, however, argue that the decline was much greater than that.[29]

Figure II.4. Output contraction in the economies in transition, 1990




*Source:* Annex table A.3.

[26] As the union of the German Democratic Republic with the Federal Republic of Germany took effect on 3 October 1990, the two are treated as separate economies for analytical purposes through 1990. Forecasts and policy discussions concerning 1991 and subsequent years pertain to the unified country only, under the designation "Germany". The estimated output decline in 1990 was in terms of GDP, which usually fluctuates less than net material product, and thus may underestimate the extent of the decline last year (see table A.3).

[27] Measured unemployment in the German Democratic Republic, which excluded involuntary short-time working, rose from less than half a per cent of the labour force in March 1990 to 8.6 per cent by January 1991; measured unemployment in Poland rose from 0.1 per cent at the end of December 1989 to 6.5 per cent by January of this year (see Economic Commission for Europe, *Economic Survey of Europe in 1990-1991* (United Nations publication, Sales No. E.91.II.E.1), p. 62).

[28] Investments financed directly from the central budget declined 19 per cent, but those financed out of the accounts of enterprises grew 10 per cent (USSR State Committee on Statistics, *Ekonomika SSSR v 1990 godu* (Moscow), January 1991, p. 2).

[29] For a discussion of limitations in Soviet output statistics, see Economic Commission for Europe, *Economic Survey of Europe in 1988-1989* (United Nations publication, Sales No. E.89.II.E.1), pp. 120-122.

The sharp deceleration of industrial output had several causes. First, was the economic transformation process itself. Changes in the governmental management system, reorganization of State-owned enterprises, controversies about privatization, and repeated changes in forms of enterprise management could not but disrupt industrial growth. This came on top of already low levels of labour productivity associated with inefficient use of labour and capital - a remnant of central planning. Second, stabilization policies reduced the overall level of demand for domestic products and regional imports. Third, restructuring policies required substantial cuts in subsidies, raising costs and discouraging purchases from regional suppliers, especially for the output of heavy industrial enterprises. Fourth, the collapse of the trade and payments system used for transactions among the Eastern European countries, and with the USSR, severed traditional links between buyers and sellers.[30] Fifth, bottlenecks in Soviet oil and raw material deliveries exacerbated an already precarious situation. Soviet coal and coke stocks reached historically low levels, sometimes enough for only a couple of days. Oil deliveries to Eastern Europe under long-term agreements were cut by about 30 per cent.

Crude oil and condensate extraction in the Soviet Union decreased 6 per cent, to 570 million tons, which was the production level of 1978. Coal production fell 5 per cent to 703 million tons. Extraction of natural gas grew by only 2 per cent, which was not enough to compensate for the decline in other types of fuel. The reasons for this were technical and logistical: a decaying production and transportation base, problems with supplies, maintenance and repairs, delays in commissioning new equipment and production facilities, as well as production losses due to strikes.[31]

Overall, industrial production is being disrupted in the Soviet Union by a widespread decline in "contract discipline". Many enterprises change their production programmes or customers in order to maximize their short-term financial gains, which are then almost universally converted into increases in wages and salaries. In 1990 the volume of defaulted supply contracts in the USSR was 17.7 billion roubles, which is almost twice that of the preceding year. Every fourth enterprise defaulted on a contract. Enterprises also hoard stocks of almost everything that can be used in their production programmes, in construction, or for barter with other enterprises. Officially stocks in excess of normal inventory needs are estimated at 220 billion roubles, which is almost one quarter of aggregate industrial production last year.[32]

Although detrimental to overall industrial performance, this conduct is understandable from the point of view of individual enterprises, given the general disarray in the economy. Traditional centralized planning and supply channels were rigid, but also fairly reliable. Now, enterprises routinely find themselves in a situation where even supplies absolutely necessary for fulfilling their obligatory State orders - to say nothing about their own production programmes - were not allotted.[33] And, with only a small number of enterprises producing, for example, a particular type of machinery, if one of those firms alters its production programme or customers, it will be very disruptive to other firms that lacked alternative sources of supply.

Difficulties in the agricultural sector mirrored those in industry. In the region as a whole, output fell more than 4 per cent. The drop was most substantial in the former German Democratic Republic (30 per cent); but output fell in all countries, especially in Bulgaria and Hungary, where a drought in the summer of 1990 caused great damage (see table A.10).

Soviet agricultural production fell 2.3 per cent. Despite a grain harvest of 218 million tons, which was 11 per cent higher than in 1989, State grain procurement was 18 million tons short of the contractual volume, necessitating an increase in food imports and requests for emergency assistance. The persistently low level of agricultural productivity and the vast amounts lost in the fields, during transportation, during storage in grain elevators and in the trade network, especially when set against additions to demand for purposes of hoarding, created the serious imbalances in the domestic food markets.

### Macroeconomics of economies in transition

The disruption outlined above represents only one side of the adjustment problem of the economies in transition. The other side entails macroeconomic disequilibrium. Under central planning, most production and distribution decisions are taken administratively, but consumers pay for goods and services with money, incomes are received in money and savings are stored in money. In a market economy, when "too much money chases too few goods", sellers raise prices. In a centrally planned economy, disappointed buyers have to hoard cash, or buy precious metals or goods with resale or barter value, or add to savings deposits. If a parallel market economy is allowed to emerge, funds leak into that market, pushing up prices there and possibly stimulating a supply response, but rarely to a large enough degree to eliminate the "monetary overhang".

The chronic shortages that were a predominant feature of central planning gave rise to substantial monetary overhangs in these economies.[34] When the transition to a market economy begins, it releases a burst of inflation and considerable social antipathy as incomes are redistributed by prices and wages rising at different rates.[35]

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30 On the collapse of the Council for Mutual Economic Assistance and the current transition to the practices common in the rest of the world, where trade is directly arranged by interested enterprises in different countries and settlement is in hard currency, see chap. III.

31 USSR State Committee on Statistics..., pp. 25-26.

32 *Izvestia* (Moscow), 5 December 1990.

33 The number of centrally allocated supply items was cut during 1987-1989 from more than 13,000 to only 618. However, the aggregate value of centrally allocated supplies declined in a far smaller proportion - from 290 billion roubles to 195 billion roubles. Even if allowance is made for price increases for items which remain centrally allocated, the discrepancy in the decreases points to the fact that the declared gradual dismantling of the system of centralized supply allocation was in fact mainly a consolidation of supply items under new, more comprehensive headings. This could hardly make the centralized supply system more effective and sensitive to the needs of enterprises (see *Kommunist* (Moscow), No. 14 (1990), p. 61).

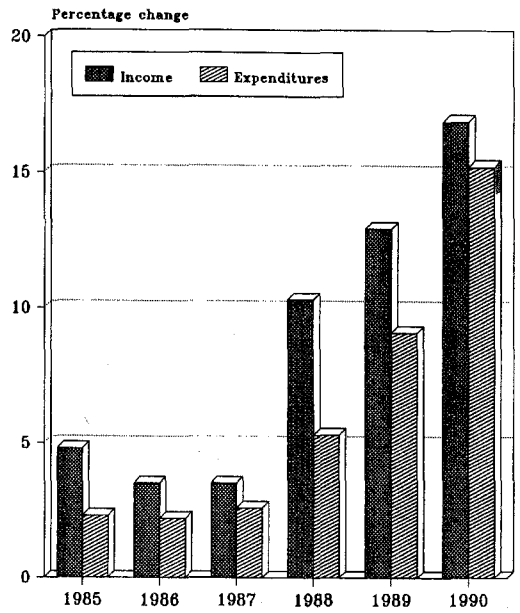
34 See János Kornai, *Economics of Shortage* (Amsterdam, North Holland, 1980).

35 For a more detailed analysis of general principles and concrete experiences of inflation in centrally planned and transition economies, see *World Economic Survey 1990* (United Nations publication, Sales No. E.90.II.C.1), chap. VI.

The initial stages of this inflationary process have been visible recently in the USSR, which is at a relatively early phase of its transition. In a situation of chronic deficits of food and almost all other consumer goods, fixed State prices and worrisome prospects for the future, there was a growing tendency to hoard whatever goods were available at the moment and, by default, to accumulate savings. The total amount of savings in deposits at the State savings bank increased 43 billion roubles in 1990 to 381 billion roubles. During the last year monetary income of the population increased 17 per cent, while expenditures on goods and services increased 15 per cent. As figure II.5 illustrates, this represents both a continued acceleration in the growth of money incomes and a narrowing of the gap between the growth rates of money income and of expenditure, the latter apparently explained primarily by a rapid increase in consumer expenditures in "panic buying" or "hoarding".[36]

But cash forms only one tenth of the amount of money and credit in the Soviet economy.[37] The stronger inflationary impetus has to do with how credit is used in the enterprise sector. The primary source of its liquidity is traceable to deficit State financing, in the form of indiscriminate and non- secured low-interest loans for investment in excessive inventories and long-term capital projects that would not be economically viable at market prices and in any event take excessive time to complete. Indeed, a system of financial bonuses and incentives meant to create stimuli for enterprises to produce more consumer goods, improve quality of production, and adhere to contract schedules has had a perverse effect. Under that system, a 1 per cent growth in the value of output of an enterprise created 1.15 per cent growth of wages and salaries of its employees.[38] In short, households continue to build up excess monetary balances (involuntary savings), while enterprise losses are covered by the fiscal budget and money creation.

Figure II.5. Household income and expenditure in the Soviet Union, 1985-1990




*Source: Ekonomika i zhizn* (Moscow), No. 51, (December 1990), annex.

At the end of December 1990, the overall retail price index was 14 per cent higher than at the beginning of the year.[39] Prices in the free ("farmers") market grew even more rapidly: in the first half of 1990, those prices increased by 18 per cent over the corresponding period of 1989; during the third quarter of the year they rose by 30 per cent, in the fourth quarter by 44 per cent, and in December alone prices increased 150 per cent. The farmers market is small - accounting for 3 per cent of sales nationally - but it is indicative of the unresolved demand pressures. The Soviet price situation thus appears unstable. It has also been highly contentious. The plan to begin a controlled increase in Soviet prices foundered in the summer of 1990 in the face of a public outcry over a proposed jump in the price of bread.

The Government took a different approach in early 1991 when, without warning, it withdrew 50-rouble and 100-rouble notes from circulation, giving people three days in which to change the equivalent of one month's salary (or larger amounts, provided they were documented as legally obtained) into smaller denomination notes. Over 8 billion roubles were not submitted for exchange and thus were, in effect, withdrawn from the stock of money. The Government also severely limited withdrawals from savings accounts for two months, which supplemented other policies to tie up excess liquidity, such as freezing the unused balance of financial incentive funds of enterprises.

Subsequently, on 13 February 1991, the central Government announced a new plan to raise retail prices as of the beginning of April by as much as 300 per cent and gradually withdraw subsidies on most consumer goods, while softening the shock with wage compensation for food-price increases. However, the economic results - and, indeed, even permanence - of this measure was impossible to estimate since the accord reached by the central authorities and several republics at the end of April was reported to put in question some major elements of the recent price and fiscal policy of the Government.

Validating suppressed inflationary pressures through open price increases may clear markets, but it does not address the source of the inflationary pressure per se, which is the continuing creation of excess nominal purchasing power. Policies must reduce the growth of purchasing power of at least some part of the population below the growth rate of output; e.g., the Government might restrict the wage increases that enterprises are permitted to grant their workers and managers (e.g., in Czechoslovakia, Hungary and Poland, a punitive tax was imposed on wage increases above certain limits). It also requires, as in the market economies, restrictive monetary and fiscal policies.

[36] A recent survey showed that consumers consider that their household stocks substantially exceed rational volumes: 1.8 times for tea, 2.5 times for sugar, 1.4 times for meat, 1.9 times for canned meat products, 1.8 times for canned fish products (see *Ekonomika i zhizn* (Moscow), No. 51 (December 1990), annex, p. 8).

[37] See statement of the Deputy Chairman of Gosbank, *Izvestia* (Moscow), 1 December 1990.

[38] *Izvestia* (Moscow), 23 October 1990.

[39] This notwithstanding, most prices were not free to rise and according to a government study, prices would have risen at least 19 per cent had they been free (see *Ekonomika i zhizn* (Moscow), No. 6, February 1991, p. 16).

Over the years, several of the economies in transition tried to avoid extensive price increases in their reform process, all without success. Some kind of price adjustments were then implemented, but imbalances persisted.[40]

There are two opposed views of how the transition to a market economy should be undertaken.[41] Both seek to end up with a new economic structure that has no inflationary bias. The first, strongly favoured by the International Monetary Fund (IMF), is to move as quickly as possible toward the new economic structure, the type of "shock therapy" that has been applied in Poland. The second path of transition entails a gradual movement to an economy with prices that are flexible enough to clear markets. In either case, a package of policies is involved, including: (a) price and trade liberalization; (b) reducing the monetary overhang through sales of various State-owned goods and assets; (c) dismantling monopolies and reducing State ownership; (d) modernizing the banking system and introducing a capital market; and (e) enhancing the convertibility of domestic money into hard currencies for some holders of currency balances.

In the "shock therapy" applied in Poland, the authorities imposed a ceiling on wage increases, cut budget subsidies, enforced financial rules on firms (making bankruptcy a real possibility), raised interest rates, devalued the zloty by almost half against the dollar and deregulated numerous prices, among other measures.[42] With the major administered prices being raised with the new year, consumer prices first jumped from a monthly rate of 18 per cent in December 1989 to 77 per cent in January, but then fell under the induced policy tightness to about 2 per cent in the summer of 1990.[43] Output began to grow in the private sector, but Poland has not yet seen a substantial supply response from its State enterprises. They survived 1990 mainly by raising prices, drawing down enterprise deposits in foreign, hard-currency accounts, shedding workers, paying lower wages and bypassing high interest rates in the banking system by extending credits to each other. This is not sustainable. Both competition and supply have to be bolstered, through the more complete implementation of privatization and other measures.

Hungary opted for a more gradual approach to price reform, believing that lasting improvements in the effectiveness of monetary policy were dependent on prior fundamental changes in the economic system. Enterprise owners are being fostered through privatization, and financial discipline is being imposed on banks and financial institutions. A legal framework for private economic activity was put in place. In addition, 90 per cent of imports have been liberalized, putting competitive pressure on domestic producers and a new anti- monopoly law was enacted in 1991. Announced monetary and fiscal targets are followed, interest rates have been raised and wage increases are limited. Yet, as in Poland, the supply response has thus far been slow to materialize. Inflation is still high: on an annual basis it was about 30 per cent in 1990 and a 40 per cent rate is expected in 1991. Unemployment is increasing and a growing number of enterprises are bankrupt.

Of the other economies in transition, Czechoslovakia has committed itself to a strict monetary and fiscal policy and a fairly quick transition to a market economy, while Romania seems more inclined towards the slower transition model. Some in Czechoslovakia are convinced that in a rigid economy like Czechoslovakia, expansionary policy cannot provoke a positive supply response.[44] Structural adjustment thus has high priority and so, in the course of 1990, the banking system was reformed, new legislation supporting the private sector was initiated, money supply growth was kept around zero, the State budget moved into surplus, the national currency was significantly devalued several times, consumer and producer subsidies were cut and food prices were increased. Remaining on the agenda, *inter alia,* is a substantial increase in interest rates, and while auctioning off State assets has been started, the implementation of privatization of large State enterprises is still very slow, impeding domestic competition and supply adjustments.

In the case of Bulgaria, work is under way, in close cooperation with the IMF, on the design of a short-term economic policy that will be part of the transformation to a market economy. Romania adopted a wide-ranging reform proposal on 28 June 1990 (Law No. 15/1990), calling for decentralization of economic structure, liberalization of price policy, and introduction of other elements of a market-oriented system, and it has set out a time-frame for implementing the reforms through June 1992.[45] With price liberalization and devaluation of the lei in April 1991, the process is under way.

### The agonizing politics of economic transformation

The differences in the approaches to economic reform in the transition economies is not surprising. There is no precedent for the transformations they are attempting. Each policy package adopted is an experiment based mainly on theory and on reasoning by analogy with the behaviour of economies in which most economic decisions are market-based, however large the involvement of the State in economic affairs. In addition, the social stakes of reform are high. Under central planning the goals of enterprises were output and employment maximization and the State ensured that a degree of social welfare needs be met, e.g., in housing and health care. While aware of its inefficiencies, many saw a certain security in the system; and that is now seen to be at risk.

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40 See *World Economic Survey 1990* ..., chap. VI.

41 The logic of the policy components of the transition process and the status of reform in the various countries is reviewed in detail in *Economic Survey of Europe in 1990-1991*..., chap. 4.

42 *Trybuna Ludu* (Warsaw), 15 December 1989, pp. 1-2.

43 Subsequently, inflation rose again to a monthly rate of 10 per cent as at February 1991 which, as Polish authorities acknowledge, required renewed policy adjustment. (The annual inflation rate of almost 600 per cent, indicated in table A.13, averages the very high rate of price increases early in the year with much slower rates at the end; however, a 10 per cent monthly rate continued for a full year would more than treble prices.)

44 See, for example, the article by the Minister of Finance for Czechoslovakia, Václav Klaus, "Policy dilemmas of Eastern European reforms: notes of an insider", Economic Review (Federal Reserve Bank of Kansas City), September/October 1990, p. 8.

45 See Government of Romania, Council for Reform, Public Relations and Information, Programme of Working Out and *Coordinating Reform Projects* (Bucharest), August/September 1990.

### Box II.2. Privatizing State property in Eastern Europe

The history of the Soviet Union proved it was possible to centrally plan the economic activity of a large nation and even mobilize it for rapid economic development. But central direction was also extremely complicated and costly, as the experience of all the centrally planned economies was to show. Interest thus grew in using changes in prices to serve as an economic coordination mechanism; i.e., rising prices of individual goods would signal higher demand and stimulate producers to raise output. At first it was thought that such schemes of "market socialism" were compatible with State ownership and control of production. Managers of enterprises could simply be directed to maximize profits. In Eastern Europe today, the preponderance of thinking is that privatization itself is required.

The early decentralization ideas did not take account of a key problem shared with large bureaucracies all over the world, namely, that standard reward structures tend to stifle efficiency and creativity of workers and managers over the long run. The question then became how to alter the incentive structure so as to transform bureaucrats into entrepreneurs. It seemed necessary to deprive managers and workers of State protection from business failure, as well as to provide them with rewards for success. Enterprises thus should be made autono- mous and free of subsidies, but able to borrow on commercial terms, although only for promising projects and working capital. This meant depoliticizing the enterprise and banking sectors and creating the conditions in which firms would face competition. As centrally planned economies move toward this type of economic system, fundamental legal and institutional questions are being addressed. One is defining the legal forms of non-State organizations, e.g., individual proprietorships, limited-liability joint-stock companies, cooperatives, and so on. Legal stipulations on the rights and limitations of the various forms of private ownership also have to be clarified, including, for example, conditions for the purchase and sale of assets. A fiscal regime has to be designed.

Principles and procedures must be established for the transformation of State-owned assets into private property. How much private investors should pay for the assets to be privatized is a problem faced in all economies, as the "market value" of assets that are not actively traded has to be imputed.

To address such issues, a spate of laws on privatization was passed in 1990 in Czechoslovakia, Hungary, the former German Democratic Republic, Poland and Romania, and the Government of Bulgaria prepared a privatization plan in late November. Coupled with the activities anticipated in the former German Democratic Republic, it thus appears that the privatization process has begun in earnest in the Eastern European region. Two examples, pertaining to small-scale firms in Hungary and large-scale enterprise in Poland, are illustrative of what is being attempted.

Under legislation passed in September 1990, Hungary foresees the transfer to private hands of some 10,000 shops, restaurants, and small businesses offering services, starting early 1991. It is the first comprehensive attempt in Hungary to privatize a major segment of the economy. The sale of domestic trade units will be a complicated process and includes the auditing of the units to be sold, the approval, in some cases, of local councils and local property committees, and then the auctioning of the shops with open bidding. It is intended that, if no difficulties arise, the process should take 135 days per enterprise. After their sale, local food and book stores will be required to retain their business profile for five years in order to avoid a disruption of service, and they may introduce changes only with the local government's consent. Purchases of the enterprises may be financed with loans from a special fund, the so-called Exisztencia Hitel, the financial resources of which would largely be supplied by the National Bank of Hungary, the central bank and eight commercial banks. Hungarian authorities acknowledge that the privatization may contribute to unemployment as 15 to 20 per cent of the manpower in domestic trade might lose their jobs. Continuance of State-owned monopolies at the wholesale level poses another problem: even if all retail units become private, wholesale monopolies could strangle the sector. In this sense, the programme is incomplete.

In September 1990, Poland started to convert the first seven of what will be a growing number of large State enterprises into joint-stock corporations, effectively owned by the Treasury. Poland intends to privatize an additional 150 to 200 large enterprises in 1991. In the programme for these cases, the capitalized value of each firm would be divided into equity shares and bonds. The Treasury would transmit 10 per cent of the value of each enterprise free as shares to the employees of the commercialized companies; 30 per cent would be issued as privatization bonds to be distributed among the population in 1991; 20 per cent would go to the social security fund, also in the form of privatization bonds; 10 per cent would be transferred as stocks to commercial banks; and the remaining 30 per cent would be placed as stocks into mutual investment funds, the shares of which would in turn be sold to the public.

Given the early stages of these privatization programmes and similar efforts in other countries, even a tentative assessment is premature. It is clear, however, that the process is slow and cumbersome and the economics of it is not fully worked out. Even when the necessary legal regulations are in place, implementation is not easy. With respect to the dispersal of ownership of large enterprises, the general lack of knowledge about financial stocks and bonds limits the demand for these instruments. If shares are distributed free, there is a possibility of abuse by knowledgeable "insiders" or traders which would undermine the purpose of the exercise. As in the mature market economies, careful monitoring of the trading of shares and detailed public disclosure of company performance will be required to build confidence in the holding of stocks. This is, indeed, one area among many in which technical cooperation and training will be important.

Indeed, during a period of growing uncertainty and fear over deteriorating welfare provision, employment conditions and real wages, long-established political groupings have been strained, old coalitions are no longer firm and people increasingly look to ethnically or nationally more homogeneous entities as political units. The changes begun in 1989 are still under way, as nations sort out the relations between central and regional authorities and between evolving legislative and executive branches of government.

In country after country in the region, the terms of economic debate have also changed. Less is seen of what once was conventional ideology. Instead, the language of neo-classical economics has become more and more prominent. Terms like "private property" and "privatization" are also routinely used in government and parliamentary documents.

Any significant policy reform is a contest between reformers and conservatives. The "correct" policy choice is never an obvious one (if it were, there would be no strong differences about what actions to take). In this light, the recent Soviet reform effort makes an important case study of the depths of indecision when so much is at stake. The Soviet Union struggled through 1990 to develop and commit itself to a path of economic transformation to a modern market-based industrial economy. A legal framework vital for a market economy is being created piece by piece, with important laws and presidential decrees on reform of the banking system, investment regime, taxation and employment already in place and many more including comprehensive civil law legislation, laws on foreign investment, privatization, demonopolization, entrepreneurship, consumer protection and protection of intellectual property in the legislative process.

At the same time, many measures that some schools of thought in the USSR consider vital were either postponed or diluted. By the end of the year, policy was still in flux and the path was still elusive, except in its broadest outline. After the major economic policy decisions were made, the Soviet public was confused and distrustful, as amply illustrated by the panic buying and hoarding. Indeed, after many months of intense and well-publicized debate and after the "Basic Guidelines for the Stabilization of the National Economy and the Transition to a Market Economy" were approved by the Supreme Soviet of the USSR,[46] a poll was conducted in November 1990 that showed that 53 per cent of the Soviet public thought that no final decision on the way to proceed had been taken and 12 per cent stated their utter confusion with the matter.[47]

The attempt by the central Government to develop a comprehensive programme of economic reform had begun in the second half of 1989.[48] A high-level State Commission for Economic Reform was created within the Council of Ministers. The Commission prepared a detailed outline of measures to stabilize the downward slide in the economy and three scenarios of transition to market: "conservative", "radical" and "moderately radical", of which the latter was accepted by the Government. The primary result of the Commission's work was a consensus on the absolute necessity of a truly radical and comprehensive economic reform. It is probably at that point that a concept of unequivocal transition to market economy became at last genuinely acceptable politically and became the official policy.

However, at that point the Government was not ready even for a "moderately radical" transformation, not least because its agencies were preoccupied with day-to-day crisis management. The Commission's documents were, for all practical purposes, shelved. Instead, Gosplan and other central economic bodies were assigned the task of developing a programme of "recovery" ("ozdorovleniye") of the national economy for submission to the national Parliament. The principal thrust of the Gosplan programme was geared to emergency efforts - in traditional command economy mould - to restore economic stability. The resulting draft was far less radical and ambitious and hardly used the Commission's conclusions. It was submitted to the Second Congress of USSR People's Deputies in the middle of December 1989.

While the plan was finally approved by the Congress, its inadequacy soon became evident: the traditional mechanisms of rigid centralized planning and economic control, which for many years had held the economy together, were rapidly disintegrating. Various republics, regions and even localities established their own rules of economic behaviour. Enterprises, forsaking the "economic discipline" of the past, actively pursued their own short-term agendas. As the result of this disarray, the national economy accelerated its downward slide.

In the meantime, several groups of prominent economists were working on plans for transition to market economy. All their drafts had one major feature in common - an emphasis on the comprehensive, relatively rapid and radical character of the transition needed. With some difference in emphasis, sequence and mode of implementation, all these programmes stressed the necessity of urgent measures to tighten financial policy, develop a solid legal and organizational framework for privatization, demonopolization and freedom of entrepreneurship.

But the central Government, while evidently having made a decision in principle to pursue a policy of eventual transition to a market system, was still not ready to accept any programme of a genuinely radical character. Despite strong criticism in the Parliament and by economic experts (both Soviet and foreign) it persevered in its efforts to devise a very gradualist, moderate and cautious strategy along traditional lines of rigid centralization, administrative methods of change, and absolute primacy of the State form of ownership.

A major fault with this approach was that it did not take into account the rapid deterioration of the economic situation, primarily in the financial sphere. The lax financial policies of recent years, the introduction of more and more entitlement programmes by elected bodies of all levels, and the rigid system of fixed prices all led to a budget deficit of such proportions that it could not be redressed by limited measures. A government plan to raise prices - including retail prices - made public by the Prime Minister in his statement in the Supreme Soviet on 24 May 1990, provoked a very strong negative reaction in all strata

[46] *Izvestia* (Moscow), 27 October 1990.

[47] *Izvestia* (Moscow), 11 December 1990.

[48] For more details on the developments in late 1989, see World Economic Survey, 1990..., pp. 154-155.

of Soviet society. As a result, the Government seemingly abandoned any attempt at price reform and reiterated its promise that "the people will be consulted" before any changes in prices are introduced in future. Meanwhile, a team of experts continued its efforts to improve the Government economic programme - along the familiar gradualist lines - with the intention of submitting it to the Supreme Soviet in September.

A certain standstill in the preparation of reform was broken by the announcement at the end of July of an agreement between the Presidents of the USSR and of the Russian Republic to form a joint group of experts to develop a common programme of transition to a market economy (the Shatalin group). Within a month the group prepared a comprehensive document that contained a blueprint for resolute and rapid transition (the "500 day" programme).[49]

By the middle of September, at least two major documents were submitted to the Supreme Soviet for consideration - the Government's and the "500 day" programmes. The Government draft had as its major component an administrative increase in prices as of 1 January 1991, but did not contain a coherent, radical programme to rein in the growing fiscal imbalances. While admitting that the national economy was in a deepening crisis, this document did not propose any consistent system of action to combat it.

An attempt to blend the two approaches was made on a directive of the President. The resulting first version of the "presidential" programme was generally considered to be almost exclusively prepared by the Shatalin group. The situation remained complicated, however, because the Government did not withdraw its own document from the Supreme Soviet.

The deputies of the Supreme Soviet were unable to make a definitive choice among the proposals. The Soviet parliament approved both versions of the reform programme submitted for its consideration and instructed that they be somehow consolidated into one document by the middle of October 1990.

Despite conceptual differences between the "presidential" and Government programmes, they were incorporated into one document, which was submitted to the Supreme Soviet and was overwhelmingly approved 19 October 1990 as the "Basic Guidelines for the Stabilization of the National Economy and the Transition to a Market Economy".

The resulting situation in Soviet economic policy is characterized by confusion, conflicts of jurisdictions and, most of all, uncertainty. Transition to a market economy has been proclaimed by the Soviet parliament as the national policy. But Soviet Government experts think that even in the best of circumstances, creation of basic market structures will take at least two to five years, and a full-fledged market economy will probably take a generation to develop.[50] At present, industrial restructuring - and economic transformation in general - is attempted through fiats and decrees. Enterprises are ordered to fulfil State orders and maintain previously designated "supply links"; regions and republics are directed not to interfere with central ministerial authority, and new non-conventional types of businesses (cooperatives, private farmers and entrepreneurs) operate in an unpredictably changing legal and administrative environment.

A number of practical steps were undertaken in the first quarter of 1991 to stabilize the economy, first of all the financial situation. They were aimed at cutting down excess liquidity (both household and corporate), increasing Government revenues (through introduction of a new 5 per cent sales tax and new progressive income tax scale), and concentrating hard currency in centralized funds. The obligatory social security contributions of the enterprises were increased substantially, and unused balances of financial incentive funds of enterprises were frozen.

Had some of these measures, along with the anti-inflationary measures noted previously, been taken as part of a comprehensive and radical programme of transition to market economy, the populace might have seen them as necessary for stabilizing the national economy and preparing the foundations for the transition. In any event, some of the measures (like preserving existing supply links and confiscating the financial resources of enterprises) were widely seen as an attempt of central Government agencies to regain administrative control of the flow of resources, both material and financial. This can hardly serve to arrest further disintegration of the evidently ineffective command mechanism for economic management and could seriously impede the declared process of transition to a market economy.

The scope, pace and the ultimate outcome of the economic reform in the Soviet Union depend heavily on political factors, such as determination and cohesiveness of the political leadership, cooperation between the legislative and executive branches of government and between the federal and republican governments, the degree of public confidence in the Government's plans and its preparedness to bear the hardship of economic transition. In this respect, the record of 1990 was, at best, mixed.

### Can the road to reform be smoothed?

Reform of planned economies entails a political process of forging an effective coalition for the proposed changes. It is similar in principle if not in degree to undertaking reforms in major industrial countries (e.g., with respect of removing protectionist barriers to competition in agriculture or textiles) or in developing countries (e.g., in gaining control of fiscal budgets in high inflation situations). In all cases, the coalition for reform can be strengthened if parties that stand to lose from it obtain transitional, compensatory measures that bolster their confidence and make the risks of reform bearable.

Realistic public fears of unemployment and falling real incomes need to be addressed. There are indications that poverty in the region is extensive and increasing. For example, it is believed that more than 40 million people in the Soviet Union live below the "poverty line" and about one third of Hungary's population live on the "lowest level".[51] In Poland, about 16 per cent

[49] *Perekhod k rynku*, 2 volumes (Moscow, August 1990).

[50] See, for example, statement of Deputy Prime Minister L. Abalkin in the Supreme Soviet, as reported in *Izvestia* (Moscow), 28 November 1990.

[51] Kommunist (Moscow), No. 3 (1990), p. 60 and "Egytized Magyarország?", Társadalmi Szemle (Budapest), No. 5 (1990), pp. 3-14.

of pensioners lived below the "social minimum" in 1978, but over 25 per cent in 1987,[52] showing the deterioration to have begun long before the latest reform programmes.

Thus, as part of the reform process, a new social welfare system should provide adequate unemployment compensation, health benefits for the unemployed, retraining of workers to facilitate structural adjustment and the provision of a "social safety net" in general terms. A strong system of unemployment compensation is needed which does not penalize enterprises for dismissing unnecessary labour but does provide sufficient compensation so as to avoid undue hardship. All Eastern European economies adopted a goal of providing incentives to workers to seek rapid re-employment with the help of a State-run network of employment bureaux. In some countries - in Czechoslovakia, Hungary and Poland, for example - the legal process to design such a system has started already. In all countries various unemployment compensation programmes are in place or in preparation. The impact of the adjustment process will place further strains on the health sector. Inadequate management and financing of health care services have already reduced the efficiency of these services. Restructuring of the health sector is high on the agenda; securing more adequate health revenues is a preoccupation. Possibilities of diversifying the sources of financing through social and private insurance are discussed. The absence of a well-developed private insurance industry makes this very difficult indeed.

Acute housing shortages have to be addressed as well. The shortage of housing is a major constraint on labour mobility and thus a major impediment to restructuring domestic economic activity. The need to provide reasonably priced housing is critical in some countries. Major programmes of housing construction can be implemented via market incentives and government investments in this sector. But adjustment of the fiscal system requires that the heavily subsidized housing loan system be changed, interest rates increased, and pay-back conditions modified. Development of mortgages for financing the purchase of land and construction costs is under way in Hungary[53] and Poland. Making it easier to transfer private property will also improve the general market conditions for housing development.

Action on the social agenda, however, requires financial resources that are not currently available. The domestic saving potential of the countries is not fully mobilized; indeed, allocating savings more productively to investment is a basic goal of the adjustment-cum-stabilization process, along with increasing the national saving rate over time.

All in all, the transformation process - of which the social agenda should be considered an integral part - has been underfunded. And, in addition to domestic sectors, international economic trends are now beginning to make the situation worse. While the countries of Eastern Europe benefited from improving overall terms of trade in most years of the later 1980s, their terms of trade are expected to worsen in 1991 and not to recover in the near term. The opposite applies to the Soviet Union; i.e., its terms of trade worsened in the later 1980s and are set to improve this year. However, it is not expected to be able to capitalize fully on the improvement in energy export prices, as supplies for export are being substantially cut back (see chap. III).

Moreover, the USSR has drawn heavily on its hard currency assets and has borrowed heavily abroad in recent years, while several Eastern European countries have been excluded from the international financial market for many years owing to their debt-servicing crises. The overall ability of these economies to attract further private financial resources in the short run appears quite limited. In essence, it is this assessment that underlies the financial support pledged by the international community to the countries of the region through official lending and debt relief.[54]

The transformation process will enter an important phase in 1991. Only Poland and Romania do not foresee a drop in net output. It is generally expected that the short-term social costs will unavoidably rise. Governments expect both inflation and unemployment to increase, at least in the first half of the year. Unemployment is predicted to be 6-10 per cent in Czechoslovakia, 4-6 per cent in Hungary, 12-15 per cent in Poland, and perhaps 10 per cent in Romania. In the Soviet Union, data for the first quarter of 1991 indicate that the contraction is already sharp. Output may have fallen by 8 per cent, investment by over 15 per cent and foreign trade contracted by about a third, compared to the fourth quarter of 1990. These data suggest that a severe decline may be in store for the year as a whole. This, then, is the environment in which the proponents of reform have to make their case for continuing, even accelerating, the pace of economic transformation.

## Developing countries

The rate of economic growth in the developing countries slowed for the third year in a row to around 3 per cent in 1990, compared with 3.4 per cent in 1989 and 5.0 per cent in 1988 (see table II.1). The decline was largely concentrated in countries of high growth. The number of countries that grew at a rate of 5 to 7.5 per cent declined, while the number of countries with growth under 5 per cent increased (table II.3). The proportion of population living in countries with stagnating or falling per capita output declined but remained large.

For the developing countries two major events characterized the year: the recession in North America and a number of other developed market economies that had been largely predicted, and the Gulf crisis that could not have been foreseen. The slowdown in the developed market economies tended to slow the growth of exports and output in the developing countries but its impact varied widely among countries. A great number of countries continued to expand their exports and output almost as vigorously as before and, where the growth of exports slowed,

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52 See Branko Milanovic, "Poverty in Poland, Hungary and Yugoslavia in the years of crisis: 1978-87", World Bank, Policy, Research and External Relations, PRE working paper No. 507 (Washington, D.C., 1990).

53 See "Housing policy reform in Hungary", paper prepared by a Joint Task Force of the Government of Hungary and the World Bank (September 1990).

54 The financial situation in the region and the status of international assistance programmes are discussed in more detail in chapter IV.

Table II.3. Developing countries:[a] frequency distribution of rates of growth of output, 1982-1990
(Number of countries)

| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | Population of countries 1989 Number (millions) | 1989 Percentage of total | 1990 Number (millions) | 1990 Percentage of total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zero or below | 30 | 35 | 27 | 26 | 19 | 23 | 23 | 18 | 18 | 207 | 7.7 | 328 | 11.9 |
| 0.1 - 2.5 per cent | 24 | 17 | 15 | 19 | 14 | 17 | 16 | 21 | 20 | 445 | 16.5 | 329 | 11.9 |
| 2.6 - 5.0 per cent | 13 | 13 | 19 | 24 | 28 | 24 | 19 | 23 | 30 | 1462 | 54.1 | 1439 | 52.1 |
| 5.1 - 7.5 per cent | 9 | 14 | 15 | 11 | 18 | 14 | 16 | 19 | 11 | 498 | 18.4 | 520 | 18.8 |
| 7.6 per cent and over | 10 | 7 | 10 | 6 | 7 | 8 | 12 | 5 | 7 | 89 | 3.3 | 147 | 5.3 |
| Total | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 2701 | 100.0 | 2763 | 100.0 |

*Source*: UN/DIESA. Data on population and population growth rates are those published by the Department in *World Population Prospects 1990* (United Nations publication, Sales No. E.91.XIII.4).

[a] Based on data for 86 countries, account for 95 per cent of the population of developing countries in 1990, excluding China.

the domestic impulses to expansion of output often continued and, in some cases, strengthened. Similarly, for a number of countries the impact of the Gulf crisis was devastating, for a number of others it was serious, while for yet others it was of limited consequence, especially in terms of economic growth foregone.

South and East Asia, despite some deceleration, remained by far the fastest growing region, Africa managed to grow only a little faster than the increase in population, and Latin America as a whole declined. The shocks of 1990 appear to have done little to change the regional pattern of growth. Many of the longer- term issues of growth and development remained important. A heavy external debt and a large outflow of resources continue to be a major constraint to investment and growth in many countries (see chapter IV). In a large number of countries, policies of structural reform and stabilization remain critically important and the battle against inflation is still to be won.

### Latin America: still battling inflation

In Latin America output contracted by about 0.7 per cent in 1990, the third consecutive year of decline in per capita GDP. A sharp decline in output in two of the biggest economies of the region, Argentina and Brazil, accounts for much of the contraction but the decline was widespread and, in a large majority of the energy-importing countries, output either fell or grew more slowly than before. Energy-exporting countries generally improved their growth performance. Inflationary pressure remained high in many of these economies, and in some cases worsened during the year, while policies adopted to control inflation had a negative impact on output. With the exception of a few countries, investment continued to stagnate or decline and the servicing of the region's external debt and the unavailability of external financial resources remain serious constraints to growth in the hemisphere.

### Economic performance and the Gulf crisis

The Gulf crisis also affected the region's economic performance. It contributed to higher export revenues and improvement in economic growth for some, increased the cost of imports for the majority and added to the pressure of inflation in many countries.

Of the countries monitored in the region, 9 out of 23 had negative growth in 1990. All of them - with the exception of Peru - are energy-importing countries. Output in Argentina and Peru contracted for the third consecutive year and Brazil - the largest economy of the region - experienced a severe recession (see below). The Nicaraguan economy is still facing severe macroeconomic imbalances and contracted by 5.5 per cent in 1990. In Honduras, domestic demand was constrained by an austere fiscal policy. GDP fell by 1 per cent.

Barbados, the Dominican Republic, Haiti and Guyana also failed to grow last year. Guyana's two major industries - sugar and bauxite - stagnated, export volumes remained below normal levels and the country's GDP fell by an estimated 1.5 per cent. Economic recession in the United States brought lower tourism revenues and contraction in output of about 3 per cent in Barbados.

In fact, most Caribbean economies, which are dependent on tourism, experienced a deceleration in growth due to the combined effect of the United States recession and the Gulf crisis. Despite a rebound in tourism towards the end of 1990, associated with rerouting of cruises from the Mediterranean to the Caribbean Sea, passenger arrivals remained between 15 to 20 per cent below the levels observed in 1989.

The Dominican Republic experienced a severe political crisis, which led to strikes and civil disturbances. The fiscal deficit deteriorated owing to overspending in an electoral year; inflation accelerated, and output contracted by about 4 per cent. The Gulf crisis compounded the country's problems. In Haiti civil unrest combined with an energy crisis meant lower industrial production and a 2 per cent fall in GDP.

Other countries experienced a sharp deceleration of growth. In Chile where an overheated economy had been growing at a rate of 10 per cent in 1989, tight monetary policy brought the growth rate down to 2 per cent in 1990. In Costa Rica, austerity measures were adopted to reduce the fiscal deficit but they

also restricted economic growth last year. Growth also lost strength in Jamaica and Paraguay.

While Governments struggled to control the fiscal budget and monetary aggregates so as to prevent inflation from rising, additional inflationary pressures were brought about by the Gulf crisis, complicating stabilization efforts in oil-importing countries. Unlike in the earlier oil shocks, higher prices in the international oil markets were passed on to domestic consumers. Adjustment was not delayed. Given the severe fiscal imbalances many countries experience nowadays, they can no longer afford subsidization of oil consumption.

In the energy-exporting countries economic growth improved in 1990. Coming out of a severe recession in 1989 when its economy declined by 8 per cent, Venezuela had GDP growth at 4.4 per cent which was mainly driven by the recovery of the oil industry. Venezuela was in fact the fastest growing Latin American country in 1990.

Bolivia registered a 2.5 per cent growth which was barely above the rate of growth of population. Investment remained inadequate to revitalize the economy. Colombia was able to maintain its growth rate at about 3.5 per cent thanks to a good performance in its external sector. Domestic demand was sluggish due to tight monetary conditions to control inflation.

Less dependent on the oil industry than before, and unable to raise oil output significantly due to past investment cuts in the sector, Mexico could not fully benefit from the increase in oil prices. The economy grew by around 2.5 per cent, somewhat below the 1989 rate. Ecuador also achieved modest growth, after a decline in 1989, despite tight credit conditions. Higher oil prices also brought some relief to Trinidad and Tobago where the GDP had been declining since 1984. Output growth was marginal at 0.5 per cent.

For the oil-exporting countries of the region, higher oil prices brought additional fiscal revenues. These countries were, however, aware of the volatility of international oil markets and cautious in their use of the windfall of high oil prices. Venezuela's budget proposal for 1991 assumed an oil price of $19 per barrel and any revenue in excess of that budgeted is to be accumulated in an economic stabilization fund so that demand growth can be checked. Mexico created a special contingency fund to guard against future drops in oil prices. The fund is composed of the extra revenue brought about by the higher oil prices as well as the proceeds from the sale of Telmex, the telephone company. Resources obtained through other privatizations will also be channelled into the contingency fund. Ecuador also created a stabilization fund which will be used for the reduction of official debt, imports of capital goods or, alternatively, in complementing government revenues if the oil price falls below the budgeted level.

The United Nations trade embargo against Iraq and Kuwait had only a minor adverse impact on the export revenues of Latin American countries. Iraq and Kuwait account for a small share of Latin American exports.[55] Higher oil prices and lower import demand of the region's major trading partner did, on the other hand, have an impact on Latin America's trade performance in 1990.

According to preliminary estimates by ECLAC the volume of Latin American exports grew by 2 per cent in 1990, well below the rate of growth of world trade for that year. This outcome was heavily influenced by the performance of Brazil, the largest exporter of the region.[56] Brazilian exports declined due to an overvalued currency and reduced credit availability. The latter is attributable to the elimination of export incentives by the Government. The volume of exports also fell in the Dominican Republic, Haiti and Peru. Elsewhere in the region, exports grew at robust rates, particularly from the energy-importing countries. In Argentina, Chile, El Salvador, Guatemala and Paraguay, exports increased by more than 12 per cent in real terms. Nicaragua and Panama also benefited from the suspension of trade embargoes imposed by the United States and their exports grew fast. These developments, however, were not enough to allow for a significant increase in the value of Latin American exports.

Exports reached $119 billion in 1990, which represented an increase of $7.6 billion over 1989. This was largely due to higher oil prices as most commodities exported by the region suffered price declines on international markets (see chap. III). In fact, 75 per cent of the increase in total exports of energy exporters can be traced to higher oil revenues.

Latin American imports grew by 7.5 per cent in real terms and most of this growth was concentrated in the oil-exporting countries, particularly Mexico and Peru. The volume of imports expanded by 12 per cent in this group of countries. In Mexico, trade liberalization measures and an overvalued currency accounted for the fast increase of imports. In Peru, imports recovered from the very depressed levels of 1989. Energy-importing countries increased their imports at a more modest rate. Oil accounted for 47 per cent of the increase of this group's total imports, and higher oil prices represented an additional claim on their limited foreign currency resources. In absolute terms, Brazil and Chile, two of the biggest oil importers in the region, were the countries most affected by the higher oil prices. But the impact was larger for the Dominican Republic, Haiti and Nicaragua who had to devote a considerable share of their export revenues to finance the additional oil bill.

After declining for two consecutive years, Latin America's external debt increased in 1990. Despite lower international interest rates, a large number of countries incurred arrears on interest payments mainly due to fiscal constraints. Interest payments due were estimated to have grown by $10 billion last year. Other countries were able to increase their external debt position by regaining access to the international capital markets. This was the case for both Chile and Mexico. The devaluation of the dollar *vis-à-vis* the other major currencies also made the value of the debt contracted in yen and in European currencies increase in dollar terms. Finally, although debt was reduced in

[55] During the period 1987-1989 exports of Latin America to these two countries averaged $400 million per year representing less than 0.5 per cent of total regional exports. Brazil is the country that trades the most with Iraq and Kuwait. About 1 per cent of the country's merchandise exports are oriented to these countries. Uruguay is the region's second largest exporter to Iraq and Kuwait with exports averaging $30 million during the period 1988-1989. This corresponds to about 2 per cent of Uruguay's total exports.

[56] Latin America's exports grew by about 10 per cent in real terms, if Brazilian exports are excluded from the region's total.

some countries, the debt reduction operations undertaken both under the Brady umbrella and outside it were not enough to offset the above developments.[57]

### Changing development strategies

In many countries of the region there has been a clear shift towards policies aimed at increasing the efficiency and competitiveness of the national economies and integrating them more closely with the world economy. Trade liberalization programmes and exchange rate reforms have been adopted in many countries. Bolivia, Peru and Venezuela simplified their tariff structure and are in the process of gradually reducing their tariff levels. Argentina, Brazil and Mexico have similar programmes. Colombia reduced the list of goods subject to prior import licenses. Measures to attract foreign direct investment have been taken, including the adoption of new rules on foreign investment which opened new areas for foreign capital participation. Mexico adopted new rules for foreign capital in 1989 so as to increase the flow of financial resources into the country. Recently, it allowed an increase of foreign participation in investments in the mining sector. Bolivia has recently liberalized foreign investment by giving foreign capital the same rights enjoyed by its national counterparts. Financial markets were liberalized in some instances (e.g., Mexico). Some countries took steps to deregulate certain sectors of the economy. Argentina has recently deregulated its oil industry, while Brazil announced deregulation measures affecting the airline industry and the distribution of fuel and petroleum derivatives. In many countries, price controls have been abolished or reduced and subsidies were eliminated or are now applied to fewer items. Governments seem to be redefining the role of the State in the economy. A slimmer State appears to be emerging. In recent years a considerable number of State-owned companies have been privatized in some countries (e.g., Argentina, Chile and Mexico), while privatization programmes have been launched in others.

Economic integration within the region received considerable attention in Latin America last year. In what appears to be a departure from past development approaches in the region, exports are perceived as an engine of growth, and regional integration is understood as an element of the overall outward-oriented strategy. Furthermore, the emergence of trade blocs in other regions appears to have strengthened the incentive among the countries of the region for closer regional trade links, to which President Bush's "Enterprise for the Americas Initiative" has added impetus (see below).

The Caribbean Community (Caricom)[58] announced a gradual increase in preferential treatment within the community which should lead to the removal of all barriers to trade among them by the middle of 1991. The group aims at evolving into a common market by 1994. Likewise, Andean Group countries[59] - with the exception of Ecuador - decided to establish a free trade zone by 1992 and to form a common market by 1993. Bolivia would move towards the common market at a slower pace, while Ecuador would join the free trade zone only by 1995 and the common market by 1997. The Central American Common Market was revived through resumption of payments clearing arrangements and commitment to revise the common external tariff to a maximum of 10 and a minimum of 5 per cent by the end of 1992. In a parallel development Argentina, Brazil, Paraguay and Uruguay announced the formation of the Southern Cone Common Market which should be fully operational by 1995.

Past integration schemes in the region had limited success. Trade amongst participating countries failed to increase as expected and intraregional trade still represents a small share of the total trade of the countries concerned. It is still to be seen whether the present outward-looking policy orientation of Latin American countries will boost trade within the region. Some of the common markets envisaged appear too small to induce a substantial growth in trade. The combined population of all Caricom members is only 5.5 million. Of the Andean Group's intra-trade, 75 per cent is already free of tariffs but still represents a minor share of the group's total trade. The elimination of the remaining tariffs may not be enough to increase trade within countries that have a very similar structure of production, all of them being mineral exporters. In the case of Argentina and Brazil, where complementarities exist and both possess a relatively well developed manufacturing sector, macroeconomic instability seems to be the major impediment to increased trade.

The "Enterprise for the Americas Initiative" announced by President Bush in June 1990 aims at intensifying economic partnership within the hemisphere. The initiative has three components: trade, investment and external debt.

The ultimate objective of the trade initiative is to create a free trade zone on the continent. Steps in that direction would be taken by the adoption of free trade agreements (FTA) with the United States on a bilateral or sub- regional basis or by the negotiation of framework agreements.

The initiative also seeks to create a more favourable climate for foreign and domestic investment. A new lending programme would be developed at the Inter-American Development Bank (IDB) to support the removal of impediments to foreign investment. Furthermore, the IDB would administer a new $1.5 billion investment fund which would provide up to $300 million per year in grants to support privatization and investment reforms. It is expected that the fund would be financed equally by Japan, the United States and Europe.

On the debt front, the IDB will also have a role in supporting commercial bank debt reduction and economic reforms. But the key proposals in this area is the reduction of the official debt the region owes to the United States. Debt reduction would be applied, on a case-by-case basis, to those countries which adopt policy reforms that have the support of the multilateral financial organizations. A significant portion of the concessional debt would be written off, while non-concessional debt would be reduced by debt-equity and debt-for- nature swaps.[60]

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57 Economic Commission for Latin America and the Caribbean, *Preliminary overview of the economy of Latin America and the Caribbean 1990* (Notas sobre la economia y el desarollo), No. 500/501 (December 1990).

58 Caricom members are: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Trinidad and Tobago, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines.

59 Bolivia, Colombia, Ecuador, Peru and Venezuela.

60 The White House, Office of the Press Secretary, "Text of Remarks by the President on the Enterprise for Americas Address" (27 June 1990) (mimeograph).

**Renewed efforts on the inflation front**

Control of inflation remains the dominant policy objective in Latin America.[61] Most of the stabilization programmes adopted in 1990 showed a preoccupation with eliminating or reducing the budget deficit and maintaining fiscal discipline. There seems to be a growing acceptance of the reasoning that past stabilization attempts have failed because control over public finances was relaxed: as the budget begins to show widening deficits, confidence in the stabilization programme vanishes, inflationary expectations become increasingly pessimistic, and prices start to adjust in anticipation of a growing inflation rate, signalling the failure of the stabilization programme.

Stabilization efforts launched in 1990 aimed at maintaining a tighter grip over public accounts. Fiscal and monetary contractions were their main elements, with less emphasis being placed on price and wage controls than before. Another characteristic of most of the recent anti-inflationary policies has been trade liberalization. The lowering of tariffs, the suspension of import bans and the removal of other import restrictions were used as tools to induce price restraint among the productive sectors. Furthermore, trade liberalization would improve access to more modern technology, increasing productivity and contributing to lower prices over the medium-term. Results, however, have been mixed so far (see figure II.6).

In March 1990 a new administration took office in Brazil where inflation was running at 80 per cent per month. Inflation was clearly being caused by severe fiscal imbalance and sustained by widespread indexation of the economy and an accommodating monetary policy. Public sector borrowing requirements had mushroomed during 1989 due to an ever increasing domestic debt the servicing of which was absorbing a large share of fiscal revenues.[62] Interest rates were extremely high and government papers could be successfully placed only in the very short-term, i.e., in the overnight, market. As money supply became endogenous to the inflationary process, there was a growing excess of liquidity in the economy, which was being continuously fed by interest payments by the national treasury, and the central bank had lost control over the monetary aggregates.

The situation needed, and the new administration took, bold action. The programme was based on two major pillars: (a) a brutal liquidity squeeze, with a freezing of all personal savings and other financial assets, which in effect amounted to a moratorium on the domestic debt; and (b) fiscal adjustment that included higher and new taxes, an adjustment of public tariffs, cut in expenditures, an administrative reform with the closing or merging of government entities and privatization of State enterprises. These measures were complemented by trade liberalization and the adoption of a floating exchange rate to be determined by the market. Prices and wages were temporarily frozen.

The initial result of the programme was temporary paralysis of the economy. Industrial output shrank by 27 per cent in May. To revive economic activity the Government started to re-inject liquidity into the system by allowing a series of conversion of the blocked new cruzados into cruzeiros, the new currency, and by establishing special credit lines. It is estimated that by around May, about 67 per cent of the frozen resources found their way back into the economy. By July, the monthly inflation rate was back to two digits at 13 per cent, wages were being informally indexed to inflation and real interest rates were low, and in some cases, even negative.

In a change in strategy, the Government opted for tight monetary controls, abolished most price controls and the formal wage indexation. It expected that in the absence of an accommodating money supply, prices would eventually stop rising. Prices, however, kept going up and interest rates skyrocketed, which put a great number of firms in financial difficulty and increased the number of bankruptcies in the economy. Inflationary pressures were also intensified by the Gulf crisis and the consequent need to raise domestic oil prices. Other public sector prices were also adjusted and the cruzeiro was heavily devalued against the dollar in the second half of the year. On the wage side, informal adjustments granted by the private sector also represented an additional pressure on costs. Real wages however did not keep up with inflation, and demand therefore declined.

The tenuousness of the early gains in the reduction of fiscal deficits remained a critical weakness of the stabilization programme. Cash surpluses had been achieved in the central Government budget, but these were largely the result of the moratorium on the domestic and external debt, the use of blocked cruzados for tax payments and the once-and-for-all tax on financial assets. These measures could not be continued for long and it was not clear how the Government would raise revenues in a situation of economic recession. Moreover, the promised structural reforms proved difficult to implement. The privatization programme was delayed and the reduction in public sector payroll was less than envisaged. The environment was not conducive to the breaking down of inflationary expectations and the productive sector adjusted to a lower demand by cutting output instead of prices. GDP contracted by 4.3 per cent in 1990, and annual inflation, measured by the consumer price index as estimated by the national statistical office, reached 1,795 per cent by the end of the year, which was marginally higher than in 1989.

With inflation out of control and facing increasing difficulties to roll over its debt, the Government launched new stabilization measures early in 1991. The plan also marked a shift in policy orientation. A price freeze was adopted after the readjustment of public utility rates and wages. Price controls were re-established and indexation was formally abolished. A renewed effort to balance public finances is to be made. State-owned enterprises are to cut expenditures by 10 per cent in real terms while most expenditures by the central Government are subject to cash availability. Trade liberalization efforts are to be accelerated, as tariffs will be lowered below the level announced last year.[63] Furthermore, the package introduced substantial changes

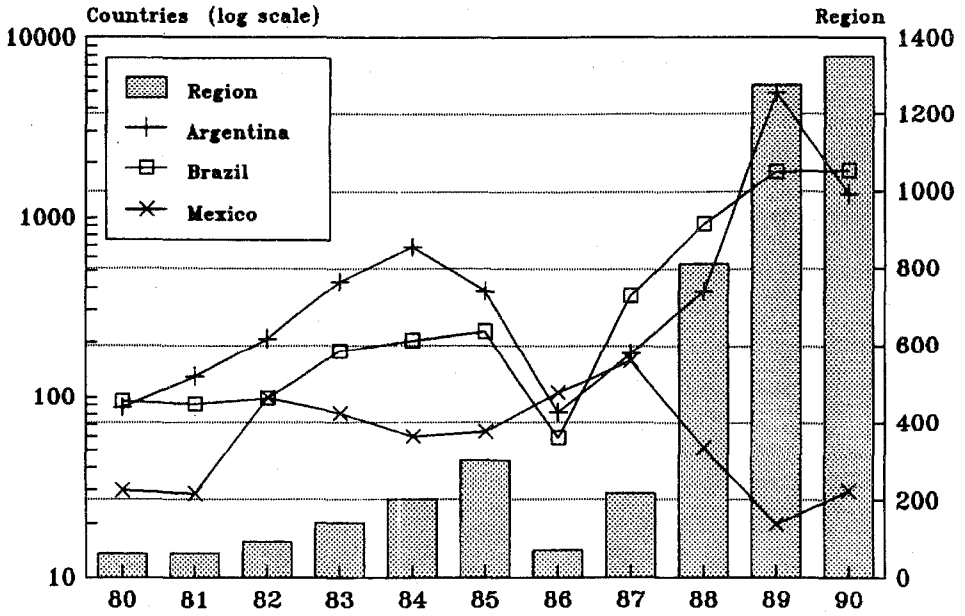
61 On the 1989 major stabilization efforts in the region see *World Economic Survey 1990* (United Nations publication, Sales No. E.90.II.C.1), pp. 23-26.

62 Public sector borrowing requirements jumped from an already alarming 48.5 per cent of GDP in 1988 to 73 per cent in 1989. Even in the operational concept - i.e., deducting expenditures on the domestic and external debt due to indexation and exchange rate fluctuations - the increase of the budget deficit was substantial: from 4.3 per cent in 1988 to 12.4 per cent in 1989 (Banco Central do Brasil Relatório 1989, Vol. 26 (Brasilia, 1990)).

63 The average tariff is expected to fall to 14 per cent by 1994 instead of 20 per cent as originally announced.

Figure II.6. Latin America: Consumer price indexes, 1980-1990

(Annual percentage change)




*Source:* UN/DIESA and ECLAC.

in financial market operations. Indexation clauses were abolished in private financial instruments with maturities of less than one year. Aiming at stretching the structure of the public debt maturity and channelling additional resources to the treasury, the Government placed higher taxes on short-term papers and abolished the overnight accounts. Short-term instruments (maturing in less than 30 days) can only be offered through the highly regulated investment funds (FAFs) which are composed mostly of government (central and states) papers.

Argentina also started the January 1990 stabilization effort with a drastic liquidity squeeze in which commercial bank time-deposits, other investments on short-term Treasury papers and all remunerated reserve obligations in the central bank were converted into 10-year dollar-denominated bonds. This, however, was not enough to control inflation. Public finances were in disarray with the fiscal deficit reaching 5.6 per cent of GDP in the first quarter, and consumer prices rising by 470 per cent in the same period. A tight fiscal policy was launched. Expenditures were to be subjected to cash availability. A value added tax was created, transfers to the provinces were reduced, public sector prices were adjusted and the privatization programme was accelerated. Liquidity in the economy was controlled by intervention in the foreign exchange market. Real interest rates became positive and inflation started to come down. Success was none the less only temporary. Public finances continued to perform unsatisfactorily, and inflation accelerated again.

A new round of austerity measures was introduced in September 1990. Public expenditures were to be further reduced, wages in the public sector were de-indexed, government debts owed to private suppliers were converted into 10-year bonds, State companies were placed under stricter controls and the monetary policy was tightened up. Interest rates continued to be high in real terms, further discouraging consumption and investment. Purchasing power of wages was eroded during the year, unemployment increased and domestic demand fell. The austral became increasingly overvalued, as the exchange rate was used as a means to control inflation.[64] Inflation did come down and reached 4.7 per cent in December but the Government budget was far from balanced by year end. Tax evasion continued to be a large problem. The economy remained in deep recession, with GDP falling by 2 per cent for the year as a whole.

With public confidence in government policies running low and excessive liquidity brought about by a record trade surplus, there was a rush to the dollar in early 1991. The austral was devalued by 37 per cent by the end of January and the monthly inflation rate hovered at around 30 per cent in February. New stabilization measures were required. Public utility rates were adjusted, a higher tax rate was imposed on banking and foreign exchange transactions and on corporate assets and the value added tax was increased in an attempt at balancing the budget by April.

64 Argentina had adopted a floating exchange rate system in 1989 but due to economic recession imports were curbed and the demand for dollars fell. In this context, and given the inflationary process, the central bank would have to intervene in the foreign exchange market to avoid the overvaluation of the currency. Such a move, however, would increase liquidity and also have a negative impact on costs. Furthermore the dollar quotation is also perceived in Argentina as a barometer for the economy. Steep devaluation of the austral would mean that further deterioration of economic conditions was imminent. Economic agents would react by raising their prices, thus feeding inflation.

In Peru, the new administration, which took office in July 1990, traced the roots of the country's inflationary process to the severe imbalances in relative prices brought about by low official prices for controlled goods and public services, a multiple exchange rate system that implied huge subsidies by the central bank and an inefficient tax system. These factors also aggravated the fiscal deficit, which was financed by printing money.

Measures adopted were, in part, similar to past stabilization efforts in that they were centred on a very sharp increase in controlled prices (e.g., an increase in the price of gasoline of 3,000 per cent), utility rates and the exchange rate. The latter, however, was unified and allowed to float in response to market conditions. Wages were adjusted upward but by a much lower rate than the increase in controlled prices. Inflation shot up to 387 per cent in August 1990 as a result of the price adjustments. As before, compensatory measures to alleviate the social costs of the programme were taken. But this is where similarities ended. Prices were freed, except for goods on a temporary list of maximum food prices, and subsidies on goods and services were eliminated. Government expenditures were limited to fiscal revenues and no credit would be extended to the Government. Emergency taxes were created and the import tariff structure was simplified. The Government was hoping that by closing the fiscal gap the growth in money supply could be cut. Interest rates increased sharply in real terms.

These Draconic measures produced quick results. The fiscal deficit shrank from 8.5 per cent in August to 1.5 per cent of GDP in September. But they also led to the collapse of domestic demand. The monthly rate of inflation receded to about 6 per cent in November, but progress on this front was none the less temporary. Failing to reform the tax structure, the Government remained dependent on taxes on gasoline and on the prices of public sector goods and services to generate revenues. In December a new round of price adjustments was required to sustain fiscal income in real terms and inflation accelerated again.

As in the case of Argentina and Brazil, the liquidity squeeze and the adoption of a floating exchange rate in a recessive environment led to an overvalued inti, thus compromising exports. With domestic demand depressed and exports constrained by an overvalued currency, the Peruvian GDP registered a 5 per cent fall last year.

Fiscal policy is also the centre of Uruguayan efforts to control inflation. Increased taxation and cuts in government expenditures reduced the budget deficit from 6.5 per cent in 1989 to 2.5 per cent in 1990. The Government also wanted to reduce interest payments on its external debt which consumed 18 per cent of current revenues in 1988, of which 64 per cent represented payments to commercial banks. A debt rescheduling agreement was negotiated with Uruguay's commercial creditors within the framework of the Brady Plan and may provide some relief to public finances (see chap. IV below). Inflation, however, increased to 130 per cent last year, compared with 90 per cent in 1989.

The acceleration of inflation in Uruguay can be largely attributed to the exchange rate policy followed by the Government. During the first three quarters of the year, the central bank actively participated in the foreign exchange market, buying foreign currency to force down the exchange rate and thus boost exports but, at the same time, injecting liquidity into the economy. Moreover, events in Argentina and Brazil had an impact on the Uruguayan economy. As seen above, the liquidity squeeze in these countries provoked an overvaluation of their currencies which also led to an increase in the competitiveness of Uruguay vis-à-vis its neighbors and a bigger inflow of tourists from Argentina and Brazil. Given the small size of the Uruguayan economy, the increase in the number of tourists injected large purchasing power into the country and thus hindered the Government's efforts to curb inflation.

Fiscal tightness is also an important component of Mexico's anti-inflationary programme. Progress on stabilizing the public finances has been impressive. Public sector borrowing requirements (PBSR) declined from 16 per cent of GDP in 1987 to 5.8 per cent in 1989 despite huge interest payments on both the domestic and external debt which amounted to 13.4 per cent of GDP. In 1990, PSBR was further reduced to 4.3 per cent. Higher oil prices during the second half of the year undoubtedly contributed to increasing government revenues in 1990. But the Mexican strategy also features strict controls on certain key prices, including prices of public sector services, wages and the exchange rate. Controlled prices and the minimum wage are occasionally readjusted but the latter usually falls behind inflation. The exchange rate is devalued daily, but the pace of devaluation has been slowed recently from 80 cents per day to 40 cents per day. Inflation in 1990 was twice as high as in 1989 owing to some relaxation of price controls and faster monetary growth which was caused by an increase in bank lending brought about by the liberalization of the sector.

The relative success on the inflation front has not, however, been translated into faster growth. Domestic demand is still constrained by the stabilization programme, though private investment has recovered somewhat. GDP registered a 2.5 per cent growth in 1990, slightly higher than the rate of population growth.

Mexico's strategy to control inflation is also leading to increasing deficits in its trade balance. Imports have been growing vigorously as a result of trade liberalization, while exports have not grown as fast, which implies that the country needs to secure a continuous inflow of foreign capital, in the form of loans or investment, to finance its balance-of-payments gap.

### Africa: asymmetries from drought and oil

The growth in output in Africa during 1990 is estimated at 3.4 per cent, just over population growth and not much different from the rate of the previous year. In sub-Saharan Africa, excluding Nigeria, output increased by around 2 per cent. But the averages hide an important asymmetry of performance between oil exporters and oil importers during the second half of the year. The average for Africa is misleading also in that it conceals the virtual stagnation of agricultural and food production in 1990.

Given the absence of Kuwaiti and Iraqi exports and the lifting of OPEC quotas, almost all oil producing countries in Africa increased their oil output considerably. The total output of oil on the continent increased by about 13 per cent from around 268 million tons in 1989 to almost 302 million tons in 1990. Several of the oil exporting countries attained a GDP growth of

4 to 5 per cent, as in Algeria, Angola, Gabon and Nigeria, or even higher, as in the Libyan Arab Jamahiriya.[65]

However, not all net oil exporting countries in Africa increased their GDP through higher oil output. In Cameroon oil production resumed the downward trend that began in 1986, was interrupted only in 1989 and decreased 5 per cent in 1990. In Congo, despite higher oil output, GDP increased only slightly because agriculture was stagnant. Among the oil exporting countries in North Africa, oil production expanded rapidly in Algeria but much less so in Egypt (2 per cent), while it declined in Tunisia. In Algeria expansion of oil production translated in 1990 into an improvement in growth performance compared to recent years, while in Egypt where the oil sector is small, GDP grew by only 1.5 per cent. In Tunisia, growth of other sectors outweighed the decline in oil output, and GDP increased by 5 per cent.

The very low or negative growth performance in a large number of countries of sub-Saharan Africa resulted from less abundant crops than had been earlier estimated. The large majority of African countries continue to be highly dependent on agriculture. In 1990, the weather was not favourable for Africa. Droughts or insufficient rainfall curtailed agricultural output in northern and eastern Ethiopia, northern Sudan, parts of the Sahel, in central Mozambique and some other areas in Southern Africa. The fragile agricultural recovery of 1989 thus appears to have been interrupted in 1990. According to recent estimates, agricultural production for the whole of Africa, having grown by 2.8 per cent in 1989, was virtually stagnant during 1990. Total food production increased very little, perhaps less than half a percentage point.[66] For poor countries with chronic balance-of-payments difficulties, sudden shortfalls in food production cannot readily be met by imports. During 1990, moreover, food imports had to compete with a sharply increased oil bill in most countries in Africa.

### More import cuts after the Gulf crisis

For the majority of countries in Africa the impact of the Gulf crisis was felt mainly through the increase in the cost of oil imports. In a few countries the adverse impact from non-oil factors was important, as direct interruption of trade and aid due to the embargo, lower remittances and loss of tourism. For Africa as a whole, the embargo on Iraq and Kuwait had only a small direct impact, given the weak trade link, and the fact that financial aid from Arab countries had already dwindled from its peak of the beginning of the 1980s. Countries with an important tourism industry suffered from the cancellation of tours. In Kenya and Tunisia, for instance, tourist arrivals and tourism revenues declined in 1990; but in Mauritius and Seychelles tourism was up despite recession and the Gulf crisis.

In some countries, the end result of the different effects of the Gulf crisis is mixed. In Egypt, for instance, the aggregate cost probably amounted to $2 billion, resulting from lost workers' remittances, a sharp reduction in tourism, lower revenues due to the reduction of commercial shipping through the Suez Canal and decline in other services. This is larger than the benefit from higher oil revenues, and the cash flow impact of debt forgiveness including the cancellation of $7 billion of military debt. It is more difficult to put numbers on the cost of reabsorbing returning migrants in the economy of a country where unemployment is already high. The Sudan, and to a lesser extent Morocco and Ethiopia, are the only other countries in Africa for which the loss in labour remittances from the Gulf is significant. Remittances are an essential source of foreign exchange earnings of the Sudan. They increased gradually after 1975 and were equivalent to at least one third, and often more than 50 per cent, of merchandise export earnings during the 1980s. In 1989 recorded remittances had been $417 million, equivalent to 77 per cent of merchandise exports. The actual flow may have been much higher as most of the remittances go unrecorded. The exact amount of this loss is difficult to ascertain. Expatriate Sudanese workers were mostly in Saudi Arabia, and perhaps between 10 and 20 per cent of the total were in Iraq and Kuwait. Estimates of the loss have varied between a low $40 million and a high $300 million. Compensatory finance is unlikely to have been obtained (except for the offer of oil credits from the Libyan Arab Jamahiriya). The country has already debt arrears over $8 billion. Of this, about $1 billion is owed to the IMF which has formally declared the Sudan to be a "non-performing" country.

The measured effect of the oil price increase for African oil importers does not add up to large numbers, since oil consumption per capita and per unit of output are relatively low in poorer countries with a low degree of industrialization. Various calculations of the added oil bill for the 20 to 25 most severely affected countries in sub-Saharan Africa[67] do not go over $1 billion in 1990. Yet, for a large number of countries in Africa the increased cost of oil imports was equivalent to more than 1 per cent of their GDP. The ability to absorb the adverse impact of the oil price increase of course varies greatly. Some net-energy importers (Botswana, Côte d'Ivoire, Morocco, Swaziland, Zambia and Zimbabwe) produce some oil, gas, or coal. This provided some cushion against the impact of higher energy prices, even if substitution between the different energy sources in the short run is impossible for certain uses. A large number of countries in sub-Saharan Africa faced a substantial increase in transportation costs, which are already comparatively high because they are landlocked or small islands (Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Lesotho, Malawi, Mali, Mauritius, Niger, Rwanda, Sao Tomé and Principe, Seychelles, Swaziland, Uganda, Zambia and Zimbabwe). A few countries, among them Mauritius, Seychelles, Zambia and Zimbabwe, imported a sizeable share of their petroleum imports from Kuwait, and, therefore, besides the price impact, faced an immediate short-term difficulty of rearranging supplies.

Most countries passed the higher import price of oil on to the consumer, although in different degrees, and with differential rates for the range of oil products, from diesel to lighting par-

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65 Oil production increased almost 14 per cent in Algeria, 6 per cent in Angola, 36 per cent in Gabon, 24 per cent in the Libyan Arab Jamahiriya and 13 per cent in Nigeria.

66 According to FAO index numbers of agricultural production, in: Food and Agriculture Organization of the United Nations, *Yearbook 1990: Production (forthcoming)*.

67 Defined as those countries for which the overall impact of the Gulf crisis is equivalent to more than 1 per cent of GDP.

affin. Sometimes these increases were very steep: in Ghana and Mozambique, petrol prices went up more than 50 per cent. Mozambique and Zimbabwe increased prices less sharply for those petroleum products that are necessities for the poorer segments of the population; Burundi changed working hours to save energy.

At the same time, prices of the major non-oil commodities exported by Africa declined. Africa, despite being a net oil exporter, suffered a 1 per cent decline in terms of trade in 1990. The terms-of-trade losses of the net oil importing countries of the continent were around 7 per cent. After years of import cuts, many countries found it difficult to adjust to the sudden increase in import prices. Further reduction in the import of intermediate inputs, energy, capital goods could only dampen output growth. Preliminary estimates indicate that the volume of imports in Africa was virtually stagnant in 1990, with imports actually declining in sub-Saharan Africa. Imports continue to compete with the debt service in the allocation of scarce foreign exchange. Total debt in sub-Saharan Africa (excluding Nigeria) is now higher than the aggregate GDP. The total debt service to exports ratio had improved in 1989 thanks mainly to an increase in exports. In 1990 the debt service probably absorbed about one quarter of export earnings in sub-Saharan Africa. For the whole of Africa, this proportion was higher, at close to 30 per cent in 1989, but probably declined in 1990 given the oil induced rise in exports.

### Threat of famine

According to the recent estimates from the Food and Agriculture Organization of the United Nations, only half a dozen countries in sub-Saharan Africa were able to increase per capita food production in 1990.[68] While some countries, like the United Republic of Tanzania and Zimbabwe, have a food surplus, other countries, e.g. Angola, Burkina Faso, Ethiopia, Liberia, Mozambique, and the Sudan, have developed serious shortfalls. Early signs of impending shortage, such as a sharp increase in the sale of livestock, have surfaced in other countries.

Civil strife in some countries (Angola, Ethiopia, Liberia, Mozambique, Rwanda, Somalia and the Sudan) contributed to the slack in agricultural production and severely disrupted the transportation of food to areas in deficit. While in Chad, where hostilities were short and limited, the economic damage was small, in Liberia, the war had tremendous consequences. More than half the population was displaced, of which 750,000 fled to neighbouring countries, mostly to Guinea, Cîte d'Ivoire and Sierra Leone, and smaller numbers to the Gambia, Ghana, Mali and Nigeria. Production in almost all sectors of the economy collapsed and famine has been widespread, especially in the capital Monrovia. Liberia might have lost more than one fifth of its GDP in 1990. The situation in Rwanda is difficult to assess, but the prolonged fighting in the northern region disrupted agricultural production, which declined in 1990 after stagnating since 1987. In Ethiopia, a combination of civil war and drought resulted in large losses of crop and livestock in the northern region, particularly in the province of Eritrea. Of Africa's population affected by war and drought, the largest number was in the Sudan. As reported in October 1990, drought affected crops and livestock in wide areas of the country. In much of the area afflicted by the war, late rainfall delayed the planting of main crops.[69] Some increase in food production was reported in 1990, but the shortfall remained large. The difficulties of meeting the shortfall were compounded by a sharp increase in the cost of oil imports and a fall in remittances from workers in the Gulf area.

### Proceeding with policy reform

For most African countries the economic policy debate continued to be dominated by the need to resolve somehow the severe balance of payments difficulties and at the same time obtain economic growth. In some cases, the recurrence of emergency situations again deflected attention and efforts from measures needed for long-term development. The search for viable country- specific adjustment and growth programmes continued at the domestic and international levels.

Among policy areas where attempts at reform continue to be made are trade and exchange rates, as well as reforms that directly affect the performance of agriculture. After years of such attempts, however, the results remain unclear. Reform efforts have faltered, circumstances have abruptly changed. Goals have not always been clear or consistent, and the resources needed for reform have been inadequate. Successes have mainly been partial or transitory.

Not many countries in Africa have liberalized their trade regimes. Nevertheless, several changes in that direction have been introduced. During the 1980s, a number of countries, such as Côte d'Ivoire, the Gambia, Ghana, Madagascar, Kenya and Nigeria, had reduced quantitative trade restrictions, simplified tariff systems, and relaxed the licensing of imports. In 1990, several other countries adopted further measures towards trade liberalization. Cameroon, Malawi, Mozambique, Sierra Leone, the United Republic of Tanzania and Zimbabwe abolished, at least partly, licensing systems for importing goods. Implementation of these or additional measures in oil-importing countries will be hampered by the recent increase in prices of oil and imported manufactures as imports are restricted mainly because of foreign exchange scarcity.

In Kenya, as in other developing countries, quantitative import restrictions and tariffs were used to raise revenues, protect domestic industry, and control scarce foreign exchange. Import liberalization took place throughout the 1980s but the process

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68 According to FAO indexes, those countries were Burundi, Cape Verde, Guinea, Mauritius, Seychelles, the Sudan and Zimbabwe.

69 Hostilities intensified again after October 1989, after a six-month cease-fire broke down. It was estimated that more than 4 million people would need emergency relief and rehabilitation assistance during 1990. Security constraints delayed relief operations. As a result of increasing food shortages, large numbers of people had begun to emigrate to Ethiopia. Sudanese fleeing conflict areas had also crossed into Uganda and Zaire. See *Emergency assistance to the Sudan and Operation Lifeline Sudan:* report of the Secretary-General (A/45/547, 8 October 1990).

was intensified during the periods 1983-1985 and 1988- 1990. Import bans were supposedly abolished in 1980, but they continued to be used. The import deposit scheme requiring importers to deposit a proportion of the import value at the central bank before the transaction could be approved was abolished in January 1983. Import duties were reduced starting in 1983 and some quantitative restrictions were converted into tariffs. In 1985 tariffs were reduced by an average of 12 per cent on a range of items. Reforms implemented since 1988 have made the import licensing system more transparent and speedy, with fewer rejections. A shift from quotas to tariffs took place, and, for imports competing with domestic production, the tariff rate has also been cut. Between 1987 and 1990, the proportion of restricted items in the total number of import items were approximately halved to 22 per cent and their share in the total value of imports to 5.4 per cent. The weighted average tariff rate declined from 24.4 to 19.9 per cent in the same period.

Yet, trade liberalization efforts in Kenya have not produced the desired growth of exports or increased availability of imports. In theory, it was expected that with liberalization increased imports of intermediate inputs and capital goods would increase productivity and make exports, in their turn, more competitive. Exports would be encouraged by reduced export taxes and by export incentives. However, over the 1980s, both merchandise exports and imports declined. Since 1984, merchandise exports have been fluctuating without a discernible trend. Agricultural exports account for about 70 per cent of the total merchandise exports in Kenya, and this sector is less responsive to import liberalization.

The success of trade liberalization could be more clearly seen in the share of exports in total manufacturing output. This share declined in Kenya during the first half of the 1980s. But since 1985, the real growth rate of manufacturing exports has been higher than the real growth rate of total manufacturing output. This suggests the desired shift of resources from the production of import substitutes to exports. The share of manufacturing exports in total exports also increased, from about 13 per cent in 1985 to 18 per cent in 1989.

Several African countries, in a trend that can be identified since 1982, have devalued their currencies, as part of adjustment efforts to bring about balance in their external accounts in the medium term. Even if this process has not been systematic, some overall depreciation in real terms has taken place in the 1980s in some countries. The results have mostly fallen short of expectation. In 1990 currency depreciation took place in several African countries. These include Guinea, Kenya, Tunisia, Uganda and Zaire. In March 1991, Angola devalued its currency by 100 per cent.

The Kenyan shilling depreciated in nominal terms by 11.4 per cent in 1990. Between 1985 and 1989 the real effective exchange rate depreciated on average 7 per cent a year, encouraging a shift in resources towards the export sector. However, the supply response to the devaluation has been low, particularly in the agricultural sector, and had little impact on the trade balance.[70] Furthermore, the Kenyan pound was never grossly overvalued during the 1970s and 1980s and thus any supply response to depreciation would be only modest.

The United Republic of Tanzania has devalued the shilling massively since 1986 and trade liberalization has been undertaken as part of stabilization measures. They appeared to have a favourable impact on exports. The volume of exports from the country increased and, as in Kenya, the share of manufactures in total exports also rose. Import liberalization measures intended to alleviate shortages included the "own-funded" imports scheme which allowed importers to use foreign exchange from unofficial and undeclared sources. Imports under the scheme came to account for 25 to 40 per cent of total imports. This was not, however, enough to ensure adequate imports of many essential imports. Domestic prices of imports outside the scheme rose and this, in conjunction with the squeeze on government expenditure as part of the stabilization programme, resulted in shortages of crucial imports such as fertilizers, pesticides, medicine, and medical school equipment. Despite such import restraint, the trade deficit continued to widen.

In Zimbabwe, a devaluation in 1990 encouraged tobacco exports. Helped by the excellent quality, strong world demand, and low sales from Brazil, Zimbabwe's currency earnings from tobacco increased by 27 per cent. But this was offset by a large increase in the cost of oil imports, and the overall trade balance surplus declined in 1990.

In Nigeria, when the Government introduced a structural adjustment programme in 1985, a large real depreciation of the naira was one of its main components.[71] The immediate price effect on export crops was large, especially on cocoa, the country's largest non-oil export. Cocoa prices in domestic currency rose threefold. In the short term, this increase more than offset the decline in world prices for cocoa, and led to new planting and rehabilitation. Domestic prices for rubber, groundnut, cotton and other agricultural intermediate goods also increased substantially, with some supply response. The direct effect of devaluation on food crops was less important, owing to their essentially non tradeable status in Nigeria (apart from rice and wheat). In 1990, however, prices received by cocoa producers declined by more than 70 per cent owing to measures that appeared to contradict exchange rate policies intended to raise domestic prices. The plunge in producer prices was largely due

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70 A recent study covering the period 1965-1985 shows that even when a nominal devaluation meant a real devaluation, it often did not improve the trade balance and was negatively associated with real output in exporters of primary products (mostly low-income African countries) owing to low demand and supply elasticities and higher costs of imported inputs. See Riccardo Faini and Jaime de Melo, "LDC Adjustment Packages", *Economic Policy*, October 1990.

71 See Box II.1 on Nigeria in *World Economic Survey 1990* (United Nations publication, Sales No. E.90.II.C.1), p.30-31.

to the combined effect of the central Government's austerity measures that brought a liquidity squeeze and higher interest rates, and the announcement of a ban on export of raw cocoa to start in 1991.[72]

Sometimes exchange rate policies can themselves be subject to constraints of some existing institutional arrangements. In Côte d'Ivoire, for instance, its participation in the franc zone ruled out depreciation to shield domestic producers against the decline in world prices. On the other hand, the decline in foreign exchange earnings from agricultural products, despite increases in the volume exported, brought increasing deficits to the Caisse de stabilization et soutien des prix des productions agricoles, the stabilization fund which acts as an intermediary between producers and the international market. With the "Caistab" increasingly indebted and near bankrupcy, the Government had to cut producer prices substantially. In the 1989/90 season, following the halving of producer prices, cocoa production fell substantially from the peak of over 800,000 tons reached in 1988/89.

In Senegal, another member of the franc zone, exchange rate overvaluation could not be addressed either. Declines in the world prices of groundnuts, until not long ago the main export crop, brought financial difficulties to the parastatal marketing organization that commercializes it, and domestic producer prices were therefore reduced in the absence of currency depreciation. In the 1988/89 season, following a 22 per cent decrease of official producer prices and a reduction in purchase and transportation subsidies, official purchases of groundnuts fell 42 per cent.[73]

One of the characteristics of the reform measures is their heavy reliance on prices as a policy instrument. As several studies have made clear in recent years, changes in prices cannot be expected to yield a big response of aggregate agricultural output if they are not complemented by non-price measures, including land and labour policies, the access of farmers to inputs and to the results of agricultural research, and to institutions providing credit, extension, marketing, and information.[74] In the United Republic of Tanzania for example, a number of these factors continues to limit agricultural production despite the introduction of price reforms. There has been some improvement in fertilizer supply and a rise in producer prices. Combined with favourable weather, this resulted in a rise in food and cotton output over the years 1986 to 1988. But in 1990 both declined and famine has been reported in some regions. This fall in output is attributed to dry spells in January and February and floods in April, and continuing marketing, storage, transport and processing problems.

Improvement in marketing remains a requirement of agricultural development in Africa. Efforts are continuing to improve existing marketing arrangements, especially through redefining the role of the parastatal marketing organizations and providing a larger role to private initiative.

In 1990 marketing was further liberalized in the United Republic of Tanzania and producer prices for the 1990/1991 season were increased for wheat, rice, beans, cotton and tobacco. Farmers are now allowed to sell their products directly to private traders, to cooperative unions, or to the National Milling Corporation (NMC). The role of the NMC is to be further reduced by cutting the number of branches and staff and ending activities unrelated to grain trade. Financial performance of the NMC is also to be improved by not allowing it to buy crops when it does not expect to make a profit. The transport bottleneck is expected to be alleviated in the next couple of years, because of projects (worth $971 million) to improve roads and the harbour of Dar es Salaam.

Improvement of marketing is also an important element in Kenya's reform programme. The National Cereals and Produce Board (NCPB) in Kenya is also being reformed, with financial help from the European Community. While rather successful in the distribution and stabilization of consumer and producer prices of cereals, the NCPB suffered from financial problems. A comprehensive plan was devised to reorganize management and the network of storage and purchase facilities, to restructure finances, to liberalize domestic trade, and to implement an effective system of control, analysis and planning of the cereal trade. So far management has been revamped, and the financial situation has improved, partly by the cancellation of debt owed to the Government and the provision of financial resources from the European Community to purchase cereals from the farmers. For the first time in years farmers were paid on time for deliveries. However, the organization is still taking financial losses due to delays in the reduction of operating and overhead costs. Of the 659 purchasing offices, 400 were closed and private traders and cooperatives are now allowed to fill in the gap. This is a difficult stage of the reform of cereal markets, as is shown by the experience of other countries.[75] The Kenyan Government and the NCPB resisted pressure from donors to liberalize the cereal market completely. Instead they opted for gradual and partial reform, with the objective of turning the NCPB into a buyer and seller of last resort and keeping a buffer stock for food security.

Domestic grain trade is also being liberalized in Ethiopia after the reforms of March 1990, which improved the security of land tenure, allowed the dissolution of producer cooperatives, eliminated the quota system of the Government's Agricultural Marketing Corporation and were meant to increase producer prices. It seems that the response of agriculture, helped by good weather (except in the northern part) was positive. But coffee production, the major export crop and the source of 60 per cent of the country's export earnings, did not increase, and the volume of coffee exports declined by 8 per cent.

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72 The immediate shift from raw to processed cocoa was difficult. Nigeria's domestic processing capacity is 90,000 tons, while crop expectations were as high as 160,000 tons. Processing plants are in need of rehabilitation and cocoa derivatives, and by-products from Nigeria face sluggish demand. Thus, the ban on raw exports did not have the desired effect and was cancelled in October 1990.

73 Groundnuts, which constituted three fourths of Senegalese exports in the 1960s, declined to less than one fifth in the 1980s and have been replaced by fish and fish products as the main source of foreign exchange.

74 See Uma Lele, "Sources of growth in East African agriculture". *The World Bank Economic Review*, vol. 3, No. 1 (January 1989).

75 The experience of Madagascar, Malawi, and Mali is documented in the *World Economic Survey 1990* (United Nations publication, Sales No. E.90.II.C.1), chap.II.

### The Mediterranean region

Despite a sharp recovery to a 7 per cent growth in Turkey and only a slight slow-down to below 5 per cent in Cyprus and Malta, the average rate of growth for the Mediterranean region in 1990 turned negative as a result of a deep decline of output in Yugoslavia.

Real GDP declined by around 11 per cent in Yugoslavia, in the wake of restrictive monetary and credit policies aiming at bringing down inflation that had reached more than 1,200 per cent in 1989. Almost all economic sectors performed badly, including agriculture. Industrial output, accounting for over 40 per cent of economic activity, fell by 11 per cent. Retail trade contracted in response to reduced personal incomes. The transportation sector was negatively affected by forest fires along the coast of Croatia, which blocked some roads and isolated some seaports from the continent. This also reduced tourism. With sharply reduced economic activity, unemployment reached some 1.3 million people, or about 12 per cent of the total labour force.

Inflation came down from a monthly rate of 42 per cent in January 1990 to zero in June. In the face of the sharp decline in economic activity, the Federal Executive Council (FEC) relaxed its monetary policy in June 1990 and inflation re-emerged in the second half of the year, threatening the FEC economic reform, in which partial convertibility of the dinar and a fixed exchange rate against the deutsche mark was tied to success in containing inflation. The dinar has been devalued twice since then.

The implementation of market-oriented reforms has encountered great political difficulties, complicated by re-emergence of nationalist and ethnic forces. Some of the six constituent republics of the federation resist economic reform and the federal Government has been unable to impose fiscal and monetary discipline.

In Turkey the economic revival of 1990 has its origins both in agriculture and industry. With very good harvests, agriculture recovered from the 1989 drought which had drastically reduced agricultural production that year. Industry, around one third of GDP, resumed its growth supported by increased domestic demand. Wage increases, including a 56 per cent civil service wage increase in 1990 plus a 70 per cent increase in support prices paid to farmers, not only fed the expansion in demand but contributed to widen the fiscal deficit. Nevertheless, at least till mid-year, inflation had been kept at bay by tight monetary policy. Inflation accelerated from virtually zero in July again to almost 9 per cent in September, and reached about 60 per cent for the whole year. The increase in oil prices after August, which was transmitted to the domestic market, and extra budget expenditures with increased mobilization of armed forces contributed to the inflationary pressure.

The Mediterranean countries, except for Malta which receives most of its oil from the Libyan Arab Jamahiriya, normally imported a comparatively high proportion of their oil from Iraq. Turkey used to obtain more than 80 per cent of its oil from Iraq. Nevertheless, there was no disruption in oil supplies after August 1990. The country increased production from its small oilfields by 26 per cent, but domestic supply is far below domestic consumption. More important, Turkey had strategic oil reserves estimated at three months, and was able to rapidly replace Iraqi and Kuwaiti oil by other sources, mainly Saudi Arabia and United Arab Emirates. The price increase, however, added at least $1.2 billion to the country's oil bill. In addition, losses in tourism, in transit trade (trucking and pipeline) and in workers' remittances have been estimated at between $1.2 and $2 billion. Moreover, it has to cope with a large inflow of refugees from the war and its aftermath. Turkey has been promised substantial support to be channelled through the Gulf Crisis Financial Coordination Group in Washington.

### West Asia: devastation and a lost windfall

The Iraqi occupation of Kuwait and a devastating war caused immense human suffering in West Asia in 1990. Tens of thousands lost their lives and hundreds of thousands suffered loss of livelihood, with the vulnerable, especially poor women and children, suffering the most. The long-term damage to the environment, still awaiting proper assessment, has no parallel in modern history. The human and environmental dimensions of the Gulf crisis loom larger than its short-term economic consequences.

The economic impact of the Gulf crisis on most West Asian countries has, nevertheless, been direct and large. The loss of output in Iraq, Kuwait and Jordan was catastrophic. In other countries, with new investment plans postponed, construction projects delayed, banking activities dampened, consumer manufacturing industries depressed and private consumption reduced, the non-oil sectors growth was only marginal in 1990. Oil output, on the other hand, expanded rapidly and helped most countries to achieve high real GDP growth. This was, however, barely enough to compensate the loss of output elsewhere and the region's aggregate GDP remained unchanged in 1990.

OPEC production quotas were suspended in response to the embargoed Iraqi and Kuwaiti oil. This allowed major countries in the region and other OPEC members to increase their oil production to fill the gap left by the loss of Iraqi and Kuwaiti exports. The non-OPEC member countries of the region also expanded their production. Oil prices increased by about 27 per cent over their 1989 level, despite an adequate global supply, and export revenues of the energy exporting countries of the region rose more than proportionately to the rise in oil prices. Their windfall gain was the largest since the 1980s.

Outside Iraq and Kuwait, the regions' oil and gas-based industries also expanded output. The cost of production in most petrochemical industries outside the region rose sharply, increasing the competitiveness of the region's petrochemical industry. Production of fertilizer also rose.

While construction projects already in the pipeline continued in most countries, uncertainty resulting from the Gulf crisis caused many large projects scheduled to start in the second half of 1990 to be frozen, and new investments were postponed. This restricted the region's construction sector, which was just recovering from a long recession. Much more important has been the destruction of economic infrastructure in early 1991. The damage to oil facilities and roads, bridges, and power supply network in Kuwait and Iraq will cost tens of billions of dollars to repair and replace.

Uncertainty resulting from the Gulf crisis also discouraged foreign investment. This was a serious threat to the region's ambitious industrial and infrastructural expansion programme, based on joint ventures with foreign interests. The end of the war saw a resurgence of interest of foreign firms in the region, mostly for reconstruction of oil facilities and infrastructure, while prospects of long-term new investment remain uncertain.

### Government finances under strain

As a result of the sudden increase in oil prices and expanded production, many countries of the region obtained windfall oil revenues. But most countries also faced unexpected expenditures, greatly straining government finances. Saudi Arabia, the largest recipient of the windfall, exemplifies the situation. Additional oil revenues stemming from higher prices and expanded production have been estimated officially at $13 billion. However, defence and security outlays rose sharply to finance the multinational military forces in the country, mobilization of the Saudi armed forces and purchase of military hardware. Expenditures to support the multinational forces and the cost of extra spending on weapons mounted to over $15 billion. Saudi Arabia also provided financial compensation of around $3.6 billion to countries mostly affected by the Gulf crisis such as Egypt, the Syrian Arab Republic and Turkey. The total extra expenditure was officially estimated at $25 billion. Prior to the Gulf crisis, the planned 1990 budget deficit was estimated at $7 billion. The actual deficit widened and reached $19 billion as extra commitments largely exceeded oil revenues.

Other countries in the region, such as Jordan, Lebanon, Yemen and the Syrian Arab Republic, which were already experiencing economic problems before the crisis, faced unexpected increases in government expenditures owing to the great number of returning migrants and the large-scale influx of refugees.

### Economic collapse in Iraq, Jordan and Kuwait

For Iraq and Kuwait, occupation, embargo and war brought the economies down in 1990 and will critically influence their economic growth in the short and medium term. Despite some sucess in economic diversification, oil accounted for over 60 per cent of Iraq's GDP in 1989. The economy had been recovering from the effects of a devastating war with the Islamic Republic of Iran, and the GDP increased, by about 4 per cent, in 1989, the first time since the war began. The trade embargo following the beginning of the crisis stopped the export of oil, and production was about 75 per cent lower in the last five months of the year than its 1989 level. Output in the petrochemical industries similarly declined. With the decline of the oil industry, production in other industries also fell. Only agriculture managed to grow. The country's GDP plunged by some 30 per cent for the year as a whole.

In Kuwait, where oil and related industries accounted for over 50 per cent of GDP in 1989, the economic decline was of a magnitude similar to that of Iraq. The output of oil declined by about 80 per cent, with a corresponding decline in other industries and services and a virtual breakdown in the country's banking sector. The total output of the country in 1990 was about 30 per cent lower than in 1989.

Apart from Iraq and Kuwait, Jordan was the country most devastated by the Gulf crisis. National output declined by some 20 per cent in the last five months of the year. The economy was already facing difficulties before the United Nations embargo: high unemployment, fiscal and external imbalances, depleted foreign reserves, resurgence of inflationary pressures and a mounting debt-service burden.

Jordan's agriculture and manufacturing industry were hit hard by the embargo. The total export losses resulting from the trade embargo on Iraq and Kuwait were estimated at $229 million in 1990. Other sectors such as transport, port services and tourism were also severely affected by the Gulf crisis. The transport sector, including transit transport links with Iraq, is vital to the Jordanian economy, normally accounting for 12 per cent of GDP and employing more than 50,000 workers. The embargo drastically reduced the transport industry and almost closed Aqaba, the only port in Jordan, which handles all the transit trade with neighbouring countries. The foreign exchange losses of the transport sector amounted to $103 million in 1990. Tourism has also suffered an even more severe setback with foreign exchange losses amounting to $274 million.

Jordanian imports from Iraq constituted 17 per cent of the country's total imports in 1989, which consisted mainly of oil, providing 80 per cent of Jordanian energy needs. Moreover, these imports were obtained on concessionary terms.

A large number of Jordanians were working in Iraq and Kuwait before the Gulf crisis. Many Jordanian migrants returned home after the outbreak of the crisis. The loss of workers' remittances from Kuwait alone through official channels in 1990 was estimated at $122 million for 1990 (equivalent to 11 per cent of Jordan's total export earnings in 1989).

Grants from other Arab countries provided a large support for both the budget and the balance of payments. Kuwait was a major source of aid, with commitments of some $75 million for 1990, which did not materialize. This, compounded with the pressing need to assist returning migrants as well as the massive influx of refugees, put the budget under severe strain.

The decline in grants and worker remittances, coupled with the fall in exports and the loss of transit trade revenue, exerted strong pressure on the balance of payments. The resource gap widened, and reserves further depleted and caused the dinar to depreciate. The total losses of Jordan resulting from the United Nations embargo on Iraq and Kuwait were estimated at $1.5 billion in 1990.[76]

### Increased economic difficulties in other countries

The Lebanese economy was already devastated by sixteen years of civil war and foreign interventions. The impact of the Gulf crisis was felt more through the increased import bill, which the country could ill afford. The spurt in oil prices added some $270 million to the oil bill. Besides this, the interruption

[76] See the report of the United Nations mission to Jordan led by Jean Ripert in October 1990 (S/21938, 13 November 1990). The estimate includes losses other than those directly resulting from the suspension of economic linkages with Iraq and Kuwait.

of workers' remittances from Kuwait was probably the most important loss for the Lebanese economy. Furthermore, the Lebanese labour market was and still is unable to absorb returning migrants.

The Syrian Arab Republic was in 1990 facing high inflation, limited foreign exchange reserves and widespread underutilization of industrial capacity, owing to persistent shortages of raw materials and spare parts. However, oil production and exports expanded rapidly as a result of new oil discoveries which recently came on stream, boosting the country's oil-export earnings. GDP grew by 5 per cent in 1990.

The impact of the Gulf crisis on the country's trade was relatively small. With an estimated 50,000 Syrians economically active in Kuwait, however, private remittances into the Syrian Arab Republic from that country used to be substantial. Much of these remittances ceased. Low or even negative economic growth of the recent past has been increasing unemployment. Though the economy recovered in 1990, the Syrian returnees could not be fully absorbed in the labour market.

In Yemen, the Gulf crisis found a fragile economy undermined by fiscal and external imbalances, high inflation and increasing unemployment. Yemeni trade with Iraq and Kuwait is negligible. However, before the crisis, Iraq and Kuwait used to supply respectively 30,000 and 20,000 barrels per day of crude oil to the Aden refinery. The interruption of Iraqi and Kuwaiti crude caused the Aden refinery's output to fall dramatically. Fuel shortages occurred with the subsequent rise in petrol and diesel prices, which in turn contributed to inflationary pressures.

Workers' remittances remained a major factor in the development of the Yemeni economy. Although they no longer represent virtually the only source of foreign exchange earnings, as they did at the beginning of the 1980s, they still account for the equivalent of 60 per cent of total merchandise exports. The Gulf crisis forced over 800,000 Yemenis to return home, which seriously reduced the flow of remittance received by Yemen. But the economic recovery continued in 1990, mainly due to expanding oil output.

As a net exporter of oil, Yemen benefited from the rise of oil prices as a result of the Gulf crisis. It is not clear, however, that the extra oil revenue offset the decline in workers' remittances, interruption of grant aid flows from Kuwait-based Arab financial organizations and the loss of revenues due to the disruption of Iraqi and Kuwaiti crude oil supplies to the Aden refinery. Power projects financed largely by Kuwait-based development institutions were delayed.

### Significant growth in some countries

Other countries in the region achieved a significant growth of GDP. Oil output in Saudi Arabia increased by over 20 per cent and the country's GDP grew by about 8 per cent, the highest rate in a decade. GDP also increased in a number of other oil-exporting countries, by 4 to 6 per cent, almost entirely attributable to increased production of oil.

In the Islamic Republic of Iran, the largest country in the region, output declined throughout its debilitating war with Iraq but was beginning to revive in 1989. The Gulf crisis provided a boost to the economy in 1990 and total output grew by around 4 per cent, the first such increase since the early 1980s.

When the Gulf crisis erupted, the Islamic Republic of Iran was still facing capacity constraints, with an average oil production of around 2.9 million barrels a day, below its OPEC quota of 3.1 million barrels. Nevertheless, the country managed to increase its crude oil production from 2.9 million barrels a day in July 1990 to 3.5 million barrels during the October-December 1990 period, which helped to offset the shortfall in Iraqi and Kuwaiti crude production. Expanding capacity was made possible through the partial restoration of old fields and the production of two new ones that came on stream recently. Although the oil and gas industries accounted for only about 15 per cent of GDP in 1989, the strong performance of this sector boosted the economic recovery, increased the Government's revenue and improved balance of payments.

Output in the non-oil sector rose marginally, exemplifying the continuing structural weakness of the economy. Agricultural output, seriously hit by the earthquake in June 1990, contracted. In the industrial sector, of which oil refining and gas liquefaction industries were the most important, refining capacity continued in 1990 to be constrained, as the Abadan refinery was seriously damaged during the war with Iraq. Other refinery facilities continue to produce at below capacity.

With windfall oil revenues resulting from the Gulf crisis, several construction projects aimed at expanding refinery capacity were launched in the third quarter of 1990. Increased oil revenues also aided the non-oil industrial sector, which had been facing shortages of imported inputs.

### South and East Asia: the strength of domestic demand

In South and East Asia, the pace of growth picked up slightly in 1990, to just above 6 per cent, after having gone through a rather sharp deceleration in 1989. This improved performance can be largely ascribed to the Republic of Korea, where strong domestic demand fueled growth, and to Malaysia, but a number of other countries also improved their growth performance. The region was adversely affected by the Gulf crisis. Its aggregate current account moved from surplus into deficit and in virtually all countries higher oil prices combined with domestic factors to push up inflation. But despite the disruptions brought on by the war, and despite some deceleration in the growth of export, it remained the fastest growing in the world (see table II.1). Investment, both private and public, especially in East Asia, grew faster than in other regions.

The four newly industrializing economies of the region - Hong Kong, Republic of Korea, Singapore and the Taiwan Province of China - together grew by 6.5 per cent, improving on last year's rate just below 6 per cent. Other East Asia - Indonesia, Malaysia, the Philippines and Thailand - together grew by over 7 per cent. The South Asian economies - the Indian subcontinent, Myanmar and Sri Lanka - as a whole performed somewhat better in 1990 than in 1989, with GDP growing by around 5 per cent. The difference between East Asia and South Asia was even higher on a per capita basis, given the differences in population growth: in East Asia per capita growth was near 6 per cent, while in South Asia it was only half that rate.

Malaysia and Thailand achieved close to double-digit growth rates, while the Republic of Korea and Singapore achieved around 8.5 per cent. At the low end, growth in Myanmar, Nepal and the Philippines did not exceed 3 per cent. There was a narrowing of the growth differential between the "first generation" of the four newly-industrializing economies and the "second generation" of manufactures and semi-manufactures exporters of the region in 1990. But the results confirm a recent trend, suggesting that the latter are beginning to replace or supplement the original four export-oriented economies as the engine of growth in the region. This partly reflects changing comparative advantages in the region, characterized by a shift of labour-intensive manufactures from Japan and the newly-industrializing countries to South-East and South Asia.

### The impact of the Gulf crisis

If the Gulf crisis and the recession in some developed countries were the main exogenous shocks for the developing countries in general in 1990, this was particularly true for the developing countries in Asia.

Except for Brunei Darussalam, Indonesia and Malaysia, all the countries in South and East Asia are net oil importers. The three oil exporters improved their balance of payments by more than $2 billion from the price increase alone. On balance, however, the region was adversely affected by the oil price increase, since the additional import bill of the oil-importing countries amounted to between 4 and 6 billion dollars. Countries like India, the Republic of Korea, Pakistan, the Philippines, Singapore and Thailand had heavily increased their consumption of commercial energy in the eighties. Moreover, the exporters of manufactures of the region are in a stage of development in which energy consumption per unit of output is higher than in some of the highly industrialized countries. Higher prices and the temporary disruption in supplies also affected agriculture, for example, when diesel-fuelled irrigation pumps had to be taken out of operation in certain areas.

In some countries of South and East Asia, the massive return of migrant workers, the loss in workers' remittances and the cost of repatriation of workers and their families and their absorption into the home economy stand out. In Bangladesh, the reported workers' remittances from all sources in recent years was equivalent to more than half of the value of merchandise exports (58 per cent for 1989). The share is about 41 per cent in Pakistan, 23 per cent in Sri Lanka, and somewhat over 17 per cent in India, as well as in the Philippines. Actual workers' remittances are higher than these shares, since recorded inflows are often notoriously underestimated. A large part of these remittances came from the Gulf area, but exact amounts are not known. Elsewhere in the developing world, only Egypt, Jordan, Yemen and the scattered Palestinians are more dependent on workers' remittances from the Gulf area.

Over 3 million migrant workers originating from South and East Asia were in the Middle East by the end of the 1980s. Probably half a million workers returned from the Gulf after August 1990. The losses in remittances for the oil importing countries of South and East Asia (Bangladesh, India, Pakistan, the Philippines, the Republic of Korea, Sri Lanka and Thailand) in 1990 probably amounted to over $1.5 billion.[77] This represents approximately 17 per cent of the total of almost $9 billion recorded inflow of remittances of these countries in 1989.

In March 1991, workers in some parts of Asia were preparing to return to the Gulf area, and if reconstruction starts at full speed, workers' remittances could return to near pre-crisis levels in the Asian countries. But it is highly uncertain whether all of the oil-exporting countries in the Middle East will ever return to the pre-war levels of reliance on foreign labour.

### Continued export performance

The Asian newly industrializing economies have ratios of trade to GDP that are among the highest in the world, and the "second generation" of successful exporters of manufactures and semi-manufactures have been expanding exports very rapidly.

Trade expansion is based increasingly on manufactured exports. Even in Bangladesh where manufacturing still represents only 7.5 per cent of GDP, exports of garments has emerged as a major export item in less than a decade, accounting for 40 per cent of export earnings in 1989-1990, and for 60 per cent of the growth of exports last year. In Sri Lanka, even though the 17 per cent export expansion in 1990 was largely due to higher tea exports, textiles came to represent more than 30 per cent of export earnings.

Intraregional trade partly offset the decline in trade due to the recession in the developed economies. Companies from the newly industrializing countries, given rising domestic labour costs, are finding alternative locations in nearby countries of South-East Asia: manufacturers from Hong Kong have established operations in southern China; Singapore industries have relocated across the Strait of Malacca to Indonesian Sumatra and to Johor Baharu in southern Malaysia; economic relations are increasing between Sumatra and Thailand; and industries from Taiwan Province of China have invested not only in the United States - the largest market - but made large investments in Malaysia, Thailand and the Philippines, and are also increasing linkages with China.

Earnings from travel and tourism had been increasing in the last years and are particularly important for the four newly industrializing countries and even more for Thailand, where tourism earns the equivalent of 20 per cent of the exports of goods, and for Fiji and the Pacific Islands. Tourism is not only a source of foreign exchange but a large source of direct and indirect employment. According to scattered information on airport arrivals, room occupancy and holiday bookings, tourism in the region in 1990 declined by some 20 per cent. It is impossible to know how much of the decline was due to the Gulf crisis and a perceived threat of terrorism, how much of it was due to the slowdown of the world economy or other causes. In the case of the Philippines, tourism had already suffered a severe setback owing to the destruction of a number of the largest hotels by the

[77] See also Economic and Social Commission for Asia and the Pacific, *Economic impact of the Gulf crisis on the developing ESCAP region: a preliminary analysis* (Bangkok, October 1990). In a few countries the loss in remittances will in fact become clear only in 1991, because there may be a temporary increase in private transfers in 1990 as nationals returning from the Gulf area bring their assets with them.

July earthquake, while in Hong Kong tourist arrivals in fact increased in 1990, since they were recovering from the indirect effect of the reduction of travel to China in the aftermath of the June 1989 political disturbances. In Indonesia, where the tourist industry still lags behind that in neighbouring States, arrivals jumped 30 per cent in 1990, despite some slow- down in the numbers of North American and European tourists.

The impact of the Gulf crisis on the trade of South and East Asia has been relatively small. Trade links between countries of the region and Iraq and Kuwait were not strong. For Bangladesh, Pakistan and the Philippines, for example, exports to Iraq and Kuwait accounted for 1 per cent of total exports or less. For India and for Sri Lanka, the share of exports to Iraq and Kuwait in total exports is somewhat higher, around 2.5 per cent for the first and almost 4 per cent for the latter. South and East Asian countries might have lost, together, some $500 million from the stoppage of all exports to Iraq and Kuwait due to the Gulf crisis, which is a small fraction (less than half a percentage point) of the total exports of the region.

It is more difficult to put numbers to the cost of disruption in construction and other service contracts, a component that, for the Republic of Korea, for instance, could be more important than exports of goods to the Middle East. The climate of uncertainty that prevailed after August 1990 evidently took its toll. Shipbuilding orders in the Republic of Korea dropped sharply after the Kuwait invasion and large trading companies suspended contract negotiations with countries in the conflagrated area.

### Domestic demand leading growth

Though exports continued to grow vigorously, economic growth in the newly industrializing countries in 1990 was actually led mainly by domestic demand. The main impulse to the strong growth performance of the economy of the Republic of Korea came from the growth of domestic demand, which raised imports faster than exports. The country's record trade surpluses of the 1980s have been vanishing and the surplus of almost $5 billion in 1989 turned to a deficit of $4 billion in 1990 - a shift of over 4 per cent of GDP. A considerable increase in real wages, a continued high level of capital spending, and especially an unprecedented construction boom, and a rise in Government expenditure and rapid monetary expansion fed the expansion of domestic demand. Already in 1989 imports were growing faster than exports, with the rate of growth of exports slowing down. Government reacted by slightly depreciating the won, changing the policy of appreciation of the currency that it had put in place since 1987. Although export growth did pick up in 1990, to 4.5 per cent compared to the 3 per cent in the previous year, the pace of import growth was more than four times higher. In the second half of 1990 the spurt in oil prices increased the country's oil import bill and added to its balance of payments deterioration. Because inflation had accelerated with the domestic boom, the Government postponed until November the decision to pass on to consumers the increase in oil prices. Inflation almost doubled, to 11 per cent in 1990.

Similar trends can be identified in Singapore. A strong domestic demand and a buoyant financial and business services sector enabled the country to achieve a growth of 8.5 per cent. Labour scarcity continued to exert upward pressure on costs and shifted competitive advantages. Export growth had gone down from 38 per cent in 1988 to 14 per cent in 1989, which was maintained in 1990. But imports have been growing even faster and the trade deficit widened.

In Hong Kong, GDP growth barely improved on the 1989 rate of 2.3 per cent. Labour shortages and the surge in oil price after August pushed up inflation. As in the Republic of Korea, Hong Kong's trade surplus turned into deficit in 1990. Domestic exports showed almost no growth or might have even declined, and the growth in total exports in 1990 is explained mainly by the growth in re- exports, mostly to and from China, which now account for some 65 per cent of exports from Hong Kong. By the end of the year there were signs of recovery, helped by a depreciation of the Hong Kong dollar after April 1990 and steady economic expansion in China. Public work programmes related to the projected new airport are expected to provide a partial stimulus.

The rate of growth of Taiwan Province of China fell to some 5 per cent, from over 7 per cent in the recent past. The expansion of output has been constrained by a steep decline in export growth over the last three years. Labour shortages, added to a 55 per cent appreciation of Taiwan's dollar over the past five years, took their toll. In 1990 export growth was only 1 per cent and domestic demand slackened. The stock market's 80 per cent plunge and saturation in the car market halved the growth in domestic consumer demand. Private investment contracted, but public investment increased. By the end of the year it seemed that exports had started responding to the 4 per cent real depreciation of the Taiwan dollar after May 1990 and domestic economic activity was picking up in response to expansionary fiscal and monetary policies.

Strong growth in other countries of South-East Asia was also largely due to rapid increases in the domestic demand. Indonesia and Malaysia received a favourable external impulse from the changes in the oil market that largely compensated for the unfavourable prices in other commodities (rubber, spices, tin, cocoa, palm oil) and the slow-down in its main export markets. Both countries mantained a strong trade surplus (an estimated $9 billion in Indonesia and $2.5 billion in Malaysia). But Indonesia's 6.5 per cent growth, and Malaysia's 10 per cent, also came from a very strong new wave of domestic investment and foreign investment originating mainly from Japan and the newly industrializing countries. Indonesia attracted last year almost $9 billion in foreign direct investment, and Malaysia $3 billion.

Strong domestic demand and the impact of the Gulf crisis led to a doubling of Thailand's current account deficit in 1990, given lower labour income from the Middle East, slower growth in tourism and an increase of almost half a billion dollars in oil bill. Thailand's exports grew by 15 per cent, owing mainly to manufactures, which now represent more than 60 per cent of total merchandise exports. But Thailand also attracted large foreign investments in 1990 and public investment, particularly in expansion of infrastructure, remained high. The growth of GDP, though lower than in the last two years, reached 10 per cent. The Philippines, had much less flexibility to cope with the adverse external shock. Export growth slowed down rapidly, to 4 per cent, almost one third of what it was in the previous year. The impact of the Gulf crisis (an increase in the oil bill of half a bil-

lion dollars and some $100-200 million lost remittances), the earthquake of July 1990, the slide in sugar exports, and, even more important, a continuing debt overhang reduced the growth of GDP to 3 per cent in 1990 from 6 per cent in 1989.

South Asian countries were more vulnerable to the shocks of the Gulf crisis than other economies of the region. In Bangladesh, India, Pakistan and Sri Lanka, GDP growth was in the range of 5 per cent. A good performance in agriculture in Bangladesh and Sri Lanka and a substantial increase in industrial production in India and Pakistan accounted for much of the growth. The growth in GDP was, however, accompanied by a very sharp deterioration in the balance of payments current account and was in general accompanied by a rise in inflation. The increase in their oil bill was around $1.8 billion, of which India's part alone represents more than $1 billion. Imports in the Indian subcontinent (except for Pakistan) also increased much faster than exports, and the aggregate trade deficit increased by some 20 per cent. Losses in remittances, and in trade with Iraq and Kuwait and tourism might have reduced foreign exchange earnings in the subcontinent by more than one billion dollars.

In India, in particular, the growing disequilibrium in the external accounts is the most worrying aspect of the present situation, in that probably output growth will be retarded again in the process of correcting it. The return of Indian workers from the Gulf, a slowing of exports and higher oil bills led to a new widening of the current account deficit to some $8 billion dollars in 1990. Foreign exchange reserves dwindled. Foreign indebtedness, in particular commercial debt, had been rising fast during the 1980s. India's debt to private creditors and commercial banks rose tenfold between 1980 and 1989 and its total debt trebled to over $62 billion. Debt service came to absorb about 30 per cent of total exports in the last years of the decade (up from 9 per cent in 1980). In face of a serious foreign exchange crisis, the Government in 1990 negotiated an IMF loan and reintroduced some import restrictions, slashing approvals for capital goods imports, increasing margins on bank loans for imports and establishing cash deposits on letters of credit for imports.

After the success of 1989 in bringing down its very high inflation, Viet Nam had to struggle again in 1990 with rising inflation, which reached a monthly rate of 13 per cent in January 1991, before coming down to some 1 per cent in March. The rate of economic growth for the year barely reached 3 per cent on a net material product basis, but GDP growth was probably higher owing to the expansion of services related to *doi moi*, the market-oriented economic reforms launched in December 1986. Agricultural production and food production on the whole increased, and the country again increased its rice exports to 1.5 million tons. Gradual *doi moi* continued. Employment in the State sector continued to shrink, and half a million employees were dismissed between 1988 and 1990, partly through closure of enterprises. Vietnamese workers returning from Eastern Europe and the Soviet Union, as well as demobilization, aggravated open unemployment. Exports, that had grown fast in 1989, had again a good performance in 1990 (some 20 per cent increase), but the trade deficit was still some $400 million. Exports of crude oil had started in 1989, and continued in 1990, at a level above 2 million tons, but, given the lack of refining capacity, the country remained a net importer of oil.

**China: economic recovery with stability**

After a sharp slow-down in economic growth in 1989, China achieved a modest recovery in 1990. The rate of growth of output in the two years, though the lowest since the beginning of a high growth path in 1978, was still above average for the developing countries as a whole, and per capita income was raised significantly. The deceleration of 1989 was the result of a stringent programme of stabilization designed to cool an economy that was growing too fast and to bring down inflation, which had been rising beyond acceptable levels. Economic growth declined to around 3.5 per cent in 1989 from over 11 per cent in 1988, and although the 1989 inflation still reached 17.8 per cent, by the fourth quarter of the year the programme had succeeded in curbing the rate of inflation. The recovery of 1990 left the gain in controlling inflation largely intact, with prices rising by only about 2 per cent for the year as a whole.

Monetary policy has played an increasingly important role in macroeconomic management; the financial sector has been gradually transformed from an appendage facilitating the implementation of physical production plans into an independent policy instrument. At the current stage of reform, however, the financial system of the country still reflects the coexistence of central planning and market mechanisms. Monetary policy is carried out through two distinct channels. One is the direct control on bank lending by the Government via credit ceilings issued from the top. The other takes the form of indirect controls through interest rates, reserve requirements and such measures.

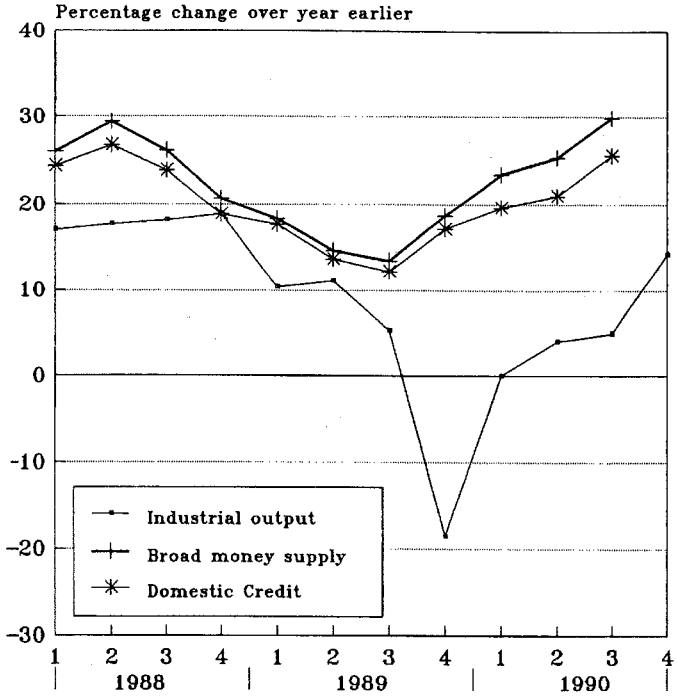
The year 1990 marked the third year of the stabilization programme initiated in late 1988 to counter the inflationary pressure that had been building up in the overheated economy in 1987-1988. The programme combined a contractionary monetary policy with a non-expansionary fiscal policy. The growth of bank credit decelerated from a rate of 25 per cent in 1988 to around 15 per cent in 1989. Interest rates on deposits were raised, and rates on long-term deposits were indexed so that real interest rates became positive by late 1989. Government deficit remained relatively small, at around 1.4 per cent of GNP.

The demand for investment was cut back by tightened central control on bank loans, but private consumption also shrank considerably. As a component of the stabilization programme, high real interest rate policy shifted income from consumption to savings. Total savings by individuals reached Rmb (renminbi) 703.4 billion by the end of 1990, registering a 36.7 per cent increase over the end of 1989. Consumer demand was effectively reduced and retail sales in 1990 were only 2 per cent higher than in 1989. Inflation was under control by the last quarter of 1989, but the stabilization programme was continued well into 1990.

By mid-1990, the economic slow-down was beginning to cause concern and the intensity of austerity measures was relaxed. A looser monetary policy was put in place in the second half of 1990 to stimulate demand and to raise the economic activity level. The supply of total bank credit increased by around 22 per cent in the first nine months of 1990 compared with the same period of 1989. With low inflation, this amounted to a substantial credit expansion in real terms. It gave the economy a much needed boost, and the year ended with a fourth quarter gain in industrial output of more than 14 per cent (see

figure II.7). Fiscal policy became somewhat expansionary, with the budget deficit as a proportion of GNP rising from 2.4 per cent in 1989 to 2.9 per cent in 1991.

Figure II.7. China: growth of industrial output, money supply and credit 1988-1990




*Source:* Data of IMF and State Statistical Bureau of China, *Monthly Bulletin of Statistics.*

Retrenchment is the central theme of economic policy during the current stabilization period, and economic reform has become a secondary priority but important reform efforts did continue. A stock exchange was opened in Shanghai and a nation-wide security trading system was established; joint stock companies were set up on an experimental basis. Enterprise reforms concentrated on improving the contract system. One aspect of the reform was the adoption of a more systematic approach to levy taxes as a percentage of total revenue.[78]

### Growth of output

GNP increased by about 5 per cent in 1990 after a 3.6 per cent growth in 1989 (table II.4). Agriculture scored another good gain in 1990. Total output grew by 6.9 per cent, with grain production surpassing the record level of 1989 and reaching 435 million tons. Output of major cash crops also increased considerably. Favourable weather was largely responsible for the record-setting performance of agriculture, but higher State purchasing prices also stimulated production.

Table II.4. China: annual change in selected economic indicators, 1988-1991 (Percentage)

| | 1988 | 1989 | 1990[a] | 1991[b] |
|---|---|---|---|---|
| Gross national product | 10.9 | 3.6 | 5.0 | 5.7 |
| Net material product | 11.3 | 3.3 | 4.8 | 5.4 |
| Industrial output | 20.8 | 8.5 | 7.6 | 7.7 |
| Agricultural output | 3.9 | 3.1 | 6.9 | 4.0 |
| Gross fixed investment | 23.5 | -8.0 | 4.5 | 10.0 |
| Value of retail sales | 27.8 | -7.6 | 1.9 | 9.0 |
| Retail price index | 18.5 | 17.8 | 2.1 | 7.8 |
| Value of exports | 20.5 | 10.6 | 18.1 | 6.4 |
| Value of imports | 27.9 | 7.0 | -9.8 | 11.0 |

*Source*: State Statistical Bureau, *Statistical Yearbook of China 1990*; and *Report on National Economic and Social Development in 1990.*

[a] Preliminary.

[b] Forecast based on project LINK.

Industrial output, on the other hand, first went into a slump, then picked up steam as the Government loosened its tight grip on bank loans and allowed more credits to be pumped into the economy. Total industrial output, including village industries, grew at 7.6 per cent (6 per cent excluding village industries) for the year.

The GNP growth rate of 5 per cent was accompanied by what can be a problem for the economy in the short term. As total output continued to grow, stocks of finished products increased to an exceptionally high level. By the end of November 1990, the stock of manufactured goods held by enterprises at the county level and above had increased by more than Rmb 45 billion,[79] and constituted a threat to future economic growth.

Despite the respectable growth rate in total industrial output, low levels of efficiency continued to be a problem in 1990, particularly in State-owned enterprises. Overall labour productivity in State-owned industrial firms increased in 1990 by only 0.8 per cent which is low especially in an upswing of an economy when output tends to increase faster than employment. Total realized profits and taxes declined more than 18 per cent, with profits alone taking a 58 per cent plunge. This is the second fall in a row, although the reduction in 1989 was rather small. During the same period, the number of loss-taking State enterprises and the amount of their absolute losses doubled.

### Prices and income

After two years of stabilization policy, inflation was sharply brought down in 1990. The index of overall retail prices, which increased by 17.8 per cent in 1989, declined to 2.1 per cent in 1990. The cost of living index increased 3.1 per cent, down from the 16.3 per cent rate of 1989. Besides reduced demand pressure, a bumper harvest in agriculture helped to contain inflation. Prices of agricultural and related products on the free farmers' market actually fell in 1990. Prices of most food items declined.

[78] State-owned enterprises used to turn all their earnings over to State authorities. Under the Enterprise Contract Responsibility programme, managers sign tax and profit agreements with the State, and above-quota performances are rewarded with profit retention and other incentives. The new attempt is to tax total revenues instead of setting separate tax and profit quotas.

[79] State Statistical Bureau, "Statistical Communique #1", *Jingji Ribao* (Economic Daily, Beijing), 16 January 1991.

The loosening of credits in the second half of 1990, combined with an upward price adjustment for some commodities and services in the fourth quarter, tended to push up inflation towards the end of the year. The cost of living index in some large and medium-sized cities was about 10 per cent higher during November and December, than in the same period of 1989.

The average wage rate increased 9.7 per cent in real terms in 1990. Falling prices of agricultural products and rising prices of industrial outputs widened the income gap between these two sectors. Urban per capita income rose by more than 11 per cent in real terms. Per capita income of peasants reached Rmb 630 (or about $130 at the official rate of exchange) and real rural income went up by 1.8 per cent. The terms of trade thus deteriorated for Chinese peasants in 1990, reversing past trends.

### Investment and employment

With the loosening of credits control, investment demand, which was held back by the austerity measures, recovered and total investment in fixed capital increased 4.5 per cent in 1990. Investment in fixed capital by State-owned units increased by 10.5 per cent over its 1989 level. However, in the same period, investment by collective enterprises declined 2.8 per cent, and private investment dropped by 5.6 per cent. State enterprises receive most of their investment funds from the State budget, which is largely independent of the profitability of the individual firm, while collective and private firms have to rely on bank credits or self-finance for their investments. As about one third of the State enterprises lost money in 1990, these figures indicate that the burden of austerity was disproportionately borne by the non-State sector.

A different picture emerges for the growth of output. Industrial output of State-owned enterprises grew at 2.9 per cent, while the Collective industrial enterprises increased output by 9.1 per cent. By contrast, output of privately- owned industrial enterprises expanded by 21.6 per cent.

The rate of unemployment is reported at 2.6 per cent in 1990, unchanged from the previous year. Underemployment in rural areas is not included in this statistic. Furthermore, there are another 3 million or so underemployed workers remaining on the State payroll, according to figures from the State Statistical Bureau. Some experts believe the actual rate of unemployment in China could be as high as 5-6 per cent.[80]

### The external sector

Macroeconomic policies followed during the year had a large impact on the external sector of the economy. China's external trade increased at a phenomenal rate over the 1980s as the country was striving for a greater degree of openness to the world economy. The volume of external trade increased by around 15 per cent a year over the period. The very high rate of growth of domestic demand had, however, been generating a persistent trade deficit since 1984. The sharp slow-down in 1989 and the continuing brake on expansion in 1990 produced a trade surplus for the first time in seven years. In 1990 total exports were valued at more than $62 billion, or an increase of 18 per cent over 1989; imports totalled $53.35 billion, or a decline of nearly 10 per cent. Excluding transactions not involving payment in foreign exchange, such as foreign aids and donations, equipment as foreign direct investment and raw materials for processing, trade surplus amounted to $13 billion.[81] According to statistics provided by the State Administration of Exchange Control, surplus on the current account of China was about $5.6 billion in 1990. Fast growing exports helped to increase the total foreign exchange reserves of China, which stood at over $28.5 billion at the end of 1990, compared with $18 billion at the beginning of the year.[82]

Several factors contributed to the improvement in China's external accounts. A devaluation of the Rmb by 21 per cent in December 1989 gave China's exports a boost in price competitiveness[83] and made imports more expensive. Perhaps more important was the impact of austerity measures which dampened the demand for imported goods. Certain economic restrictions imposed on China by Western Governments in late 1989 also reduced the amount of imports available to China. Although oil constitutes a small proportion of China's exports, higher oil prices also raised the value of total exports and contributed to the trade surplus.

The flow of foreign investment into China recovered somewhat in 1990, as countries lifted restrictions. New contracts worth $12.3 billion were signed during 1990, representing an increase of 7.4 per cent over 1989.

## Short-term outlook for the world economy

### Risks and uncertainties

The end of the Gulf war early in 1991 has lessened some of the large uncertainties that surrounded the short-term prospects for the world economy. It no longer seems plausible, for example, that oil prices would soar to the very high levels expected at the beginning of the Gulf crisis. Consumer and business confidence, shaken during the crisis, appears to be returning at least in some developed market economies.

Yet there are considerable risks and uncertainties. The threat of political instability in the Middle East and elsewhere remains. The cost of reconstruction of the two war-devastated economies of the region and the length of time it would take to restore them to pre-crisis levels are still not known with any degree of certainty. Perhaps more important for the world economy is the uncertainty about the speed and process of transition in Eastern Europe and the Soviet Union. Large fiscal imbalances, high rates

80 *South China Morning Post* (Hong Kong), 19 February 1991.

81 State Statistical Bureau, "Statistical Report on National Economic and Social Development in 1990", *Renmin Ribao* (People's Daily, overseas edition, Beijing), 23 February 1991.

82 International Monetary Fund, *International Financial Statistics* (Washington, D.C., March 1991).

83 Since the depreciation in December 1989, another devaluation was announced in November 1990. The exchange rate was raised from Rmb 4.73 to Rmb 5.23 per United States dollar, effectively devaluing the Chinese currency by 9.5 per cent. The average exchange rate for 1990 was Rmb 4.78 per United States dollar.

of inflation, difficulties of privatization, the breakdown of intraregional payments arrangements, and ethnic and political problems have all made growth prospects of these economies highly uncertain.

Considerable uncertainties also surround the future course of interest rates. The large investment needs of the European economies in transition and the needs of the Gulf States have increased the world demand for credit. On the other hand, there are uncertainties about its supply and price. In some of the major developed market economies commercial banks, shaken by falling world prices and large bankruptcies among borrowers, remain reluctant to lend to some of their traditional customers.

The outcome of the Uruguay Round of trade negotiations, resuscitated after its collapse in December 1990, is another area of uncertainty that will vitally affect world growth prospects in the long term. Even in the short term, however, failure of the negotiations could lead to a surge of protectionism and a loss of confidence in the trading system that would present a serious risk to the world economy.

### Policy assumptions in the forecast

The forecasts for the growth of the world economy in 1991 and 1992 are based on a number of assumptions.

Monetary policy is expected to ease in a few developed market economies such as the United States and Canada in response to recession and rising unemployment. Germany and Japan, however, are assumed to maintain their restrictive monetary policy stances. Short-term interest rates in the United States are thus assumed to fall by about 130 basis points in 1991 and then, in response to the expected economic recovery, to rise by 40 basis points in 1992.[84] In France, the Federal Republic of Germany and Italy, on the other hand, short- term interest rates are assumed to remain about the same in 1991 as in 1990 due mainly to large budgetary transfers within Germany and the anti-inflationary stance of the Bundesbank in conjunction with the operation of the Exchange Rate Mechanism (ERM) of the European Economic Community.

The fiscal stances in most developed market economies are assumed to be moderately restrictive or neutral. The rate of growth of real government spending in 1991 is expected to fall or remain unchanged in all major developed market economies except Italy, where it is expected to grow by less than 2 per cent. Germany is also expected to further reduce its fiscal stimulus by an income tax surcharge of 7.5 per cent beginning 1 July 1991, and an increase in oil taxes. For the United States, the forecast includes the assumption of a one- time increase in military spending for the Gulf war, which is largely responsible for an overall increase in real federal expenditures of 2 per cent in 1991.

It is assumed that there will be a further narrowing, and subsequent reversal, of interest rate differentials between the United States and the major countries in the EC and that interest rate differentials among the ERM members will remain relatively stable. In the baseline forecast, the United States dollar is expected to depreciate against the currencies of 5 major developed market economies in 1991. Beyond 1991, with the exception of further appreciation of the Japanese yen, the baseline forecast assumes relatively little further change. The United Kingdom joined the ERM recently and most EFTA countries are expected to maintain their current exchange rates vis-à-vis the deutsche mark.

Developing countries in Africa and Latin America, which are pursuing programmes of stabilization and reform, are assumed to remain committed to their success. A basic component of these programmes is a restraint on government spending, the initial impact of which tends to be deflationary. In Asia, a number of East and South-East Asian developing countries are assumed to tighten their fiscal and monetary policy stances in response to increasing inflationary pressures. China, on the other hand, is assumed to relax its restrictive policy stance somewhat.

An important assumption behind the forecast concerns oil prices. After an average increase of about 27 per cent in 1990, the average dollar price of oil is assumed to decline by about 6 per cent to $19 per barrel in 1991, and then to rise by 6 per cent in 1992.

Unit values of food and beverage exports are expected to fall by 3 per cent in 1991, and rise by 1.5 per cent in 1992. Regarding the prices of agricultural and industrial raw materials, a 3.3 per cent increase is expected in 1991, followed by about 7 per cent in 1992.

### Forecasts for 1991 and 1992

World output is expected to stagnate in 1991, after a 1 per cent growth in 1990, and to grow by about 2 per cent in 1992 (see table II.1).

In the developed market economies, growth is expected to slow further to about 1.4 per cent in 1991, down from 2.4 per cent in 1990, but is expected to recover to 3 per cent in 1992.[85] In 1991, the weakness of these economies is expected to be more pronounced in the United States and Canada than in Western Europe and Japan but their relative position is likely to be reversed in 1992. In the European Community, relatively strong, albeit slowing, growth in western Germany in 1991 is expected to offset negative or very low growth rates in most other countries of the region. A major source of the recovery expected in 1992 is a resumption of high growth in real private investment in anticipation of the unified internal market after 1992.

Reflecting the slower pace of world economic activity, growth in the volume of world trade is expected to be below 4 per cent in 1991, the lowest rate of growth since 1985. As growth in world demand accelerates in 1992, world trade growth is expected to increase to more than 5 per cent. Exports of manufactures are expected to continue to increase faster than total world trade, at an annual rate of about 6 per cent once the current recession ends.

In Canada and the United States private consumption, especially on consumer durables, business fixed investment, and residential construction are all expected to be more depressed

[84] A basis point is 0.01 percentage point.

[85] Figures for 1991 and 1992 include the six eastern *Länder* of Germany. There is therefore a break in the series after 1990.

in 1991 than they were in 1990. The recession is expected to be cushioned to some extent in the United States by export volumes growing much more rapidly than domestic demand. The impact of increased defence spending and increased consumer confidence combined with easing of monetary policy are expected to lead to a resumption of growth in the country in the second half of 1991. In Japan, slower export growth and the impact of high interest rates on housing and business fixed investment are expected to lead to a slow-down in GNP growth to 3.4 per cent in 1991, about 2 percentage points lower than in 1990. In the unified Germany, GDP growth is expected to be under 1 per cent in 1991, but to approach 2 per cent in 1992. High interest rates and a less expansionary fiscal policy are expected to repress domestic demand in western Germany where GNP growth is expected to slow to 2.7 and 2.2 per cent in 1991 and 1992, respectively. In eastern Germany, GDP is expected to decline by about 20 per cent in 1991 following a contraction of over 13 per cent in 1990, and to fall further in 1992 before stabilizing.

Mainly as a result of the increase in oil prices during the second half of 1990, the average annual inflation rate in the developed market economies, measured by the index of consumer prices, is expected to continue to rise somewhat in 1991 despite the slow-down in economic activity (see table A.5). It is, however, expected to remain around 5 per cent and to fall by about one half of a percentage point in 1992, reflecting a lagged response to lower commodity prices and wage restraint induced by rising unemployment rates in 1991. This easing of inflationary pressures and weakness in economic activity has made it easier for policy makers in some countries, notably the United States and Canada, to reduce interest rates. Reflecting the slowdown of economic activity, unemployment in developed market economies is expected to increase further to about 7 per cent in 1991 and to remain high in 1992, with the increases concentrated in Australia, Canada, Finland, Sweden, the United Kingdom and the United States.

The size and pattern of major trade imbalances is expected to change significantly in 1991 and 1992. The decline of output in eastern Germany combined with income support through transfers from western Germany has greatly increased imports of the unified Germany, while export growth is expected to slow down in western Germany and continue to decline in eastern Germany. The trade balance of unified Germany is expected to decline by about $20 billion in 1991 and by a further $17 billion in 1992. Elsewhere in Europe, France, Spain and the United Kingdom are expected to continue to exhibit relatively large trade deficits, while the United States is expected to show an improvement of about $14 billion in its trade deficit in 1991, but little further improvement thereafter since no significant further dollar depreciation is expected. A weakening of the yen and the increase of import demand in the EC are expected to lead to an increase in the trade surplus of Japan, which had declined in 1990. Among the newly industrializing economies, the small trade deficit of the Republic of Korea in 1990 is expected to worsen by about $1 billion in 1991 and the trade surplus of Taiwan Province of China is likely to fall by a similar amount. In West Asia the trade surplus of oil exporting countries is expected to fall by about $10 billion as imports increase for post-war reconstruction. For the USSR a temporary improvement in the trade deficit by about $10 billion is expected in 1991 owing to the shift to world market prices in trade with the countries of Eastern Europe, which will mean a very large terms-of-trade gain for its oil exports, more than sufficient to offset the expected decline in their volume.

Financing these imbalances is not expected to pose any immediate problems, but the increases in the financing sought by deficit countries is expected to cause relatively high real interest rates to persist, indeed to increase when the pace of economic activity strengthens in 1992. Net capital flows to developing countries are expected to increase slightly, and the recent trends of changes in their composition are expected to continue. Further increases in net transfers to sub-Saharan Africa are expected in 1991 and 1992 and to North Africa as well, owing mainly to increased lending by multilateral financial institutions and official bilateral sources. Net financial transfers from Latin America and the Caribbean are expected to remain large.

For countries dependent on primary commodity exports, the weakness in world commodity markets is expected to more than offset the small improvement in net capital flows. These countries, those heavily burdened with debt, and those struggling to reduce inflation are all expected to experience slow growth in 1991.

In South and East Asia, GDP growth is expected to be about 5.5 per cent in 1991, slightly lower than in 1990. In most countries, weaker demand in the developed market economies, capacity constraints and the negative effects from the Gulf crisis have all been important causes of the slow-down. In response to inflationary pressures as a result of rapid wage increases, especially in skilled labour categories, many countries in the region have tightened their macroeconomic policies. Despite the slow-down, GDP growth is expected to remain above 5 per cent in a number of economies including China, Indonesia, Republic of Korea, Malaysia, Singapore, Taiwan Province of China and Thailand. Pakistan is expected to have a growth rate of nearly 5 per cent in 1991 and somewhat faster growth in 1992. In India, GDP growth is expected to slow to about 4 per cent in 1991.

In China, less restrictive monetary policies are expected to encourage higher rates of investment in industrial plant and equipment. Agricultural output is also expected to increase substantially. Combined with buoyant consumer demand, these factors are expected to lead to an acceleration of GNP growth to about 5.7 and 6.3 per cent in 1991 and 1992, respectively. In view of a number of potentially inflationary factors, i.e. currency depreciation, rapid increase in the money supply and price reform, policy makers are expected to prevent investment and growth from increasing much faster. In 1991, the trade surplus is expected to fall by $2 billion and to decline by another $1.5 billion in 1992 since import demand induced by higher GDP growth is expected to outstrip the growth of exports.

In West Asia, declines in output are expected in 1991 due to the disruption of economic activities caused by the crisis in the Gulf, the trade embargo, and the destruction of productive capacity in Iraq and Kuwait. Strong growth in the construction sector and the gradual restoration of oil production and refining capacity are expected to lead to positive growth in the second half of the year and to result in a sharp increase in output, possibly as much as 10 per cent, in 1992.

In most of the large and medium-size countries in Latin America, GDP is expected to stop contracting, or to expand at

a slightly faster rate in 1991, resulting in overall GDP growth for the region of about 1.5 per cent. Growth in 1992 is expected to approach 3 per cent. In Argentina, Brazil, Peru and Uruguay, stabilization policies designed to curb inflation had resulted in contractions of output in 1990, but this process is expected to achieve some success in 1991. In Bolivia, Chile, Ecuador, Mexico and Venezuela, substantial progress has been made in reducing the level of external debt and increasing exports so that debt service obligations have been reduced in relation to export earnings, permitting some acceleration of growth in 1991 and 1992. Among the smaller countries of Central America and the Caribbean, except for Costa Rica, there has been much less progress in reducing external debt. Terms of trade deteriorated with the increase in oil prices in 1990, civil unrest is a problem in some of them, and changes in trade regimes in eastern Europe and the USSR have meant a considerable erosion in Cuba's import capacity. GDP growth in Central America and the Caribbean is thus expected to be only slightly positive in 1991 and to be only about 2 per cent in 1992.

Most countries of Africa continue to be highly constrained by structural problems, pressure on government budgets and weak growth in exports compounded by deteriorating terms of trade. GDP growth in sub-Saharan Africa, excluding Nigeria, is not expected to exceed 3 per cent. This implies a continuation of nearly a decade of declining output per capita. Nigeria, however, is expected to grow by about 4 per cent in 1991, somewhat less than the 5 per cent recorded in 1990.

Countries in Eastern Europe and the Soviet Union were finding that economic reform had high short-term costs as output contracted by 6 per cent in 1990 and is expected to contract by a larger amount in 1991. The abrupt switch to world market prices and settlement in convertible currencies for trade among the former members of CMEA is expected to lead to a sharp contraction in trade and to intensify trends of declining output.

In the Soviet Union, the breakdown of the discipline of contract fulfilment in the centrally planned system, the limited progress in establishing a market- based system of price determination and enterprise autonomy, and uncertainy regarding the likely extent of decentralization of responsibility for economic policy between the Union and its constituent Republics, are expected to lead to a sharp decline in output in 1991.[86] The declines in military spending and fixed investment are expected to be much greater than in other sectors or categories of expenditure but this, at least, reflects a planned reordering of priorities. A further small reduction in output is expected for 1992.

In most of the countries of Eastern Europe, output declines are expected in 1991. In Poland and Romania, however, a small increase in output is expected for 1991 following a large decline in 1990. In 1992 Poland is expected to grow by about 5 per cent, led by a recovery in exports and industrial production.

[86] Official estimates put the decline in NMP at 10 per cent in the first quarter of 1991.

# Chapter III

## INTERNATIONAL TRADE

### Overview

#### Trends

The volume of world merchandise trade grew roughly 4.0-per cent in 1990 - which marked a significant slow-down from the 8.4 and 6.8 per cent recorded in 1988 and 1989, respectively. (See table III.1). None the less, this rate of expansion represented the sixth consecutive year in which the increase in world trade exceeded the growth of world output, so that trade could once again be seen as one of the more dynamic elements in the world economy (see figure III.1).

Table III.1. World trade, 1980-1990: annual change

(Percentage)

| | 1980 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|
| Volume of world trade | 2.4 | 4.2 | 6.0 | 8.4 | 6.8 | 4.0 |
| Exports | 2.4 | 4.8 | 6.4 | 8.0 | 6.6 | 4.3 |
| Imports | 2.4 | 3.5 | 5.6 | 8.7 | 6.9 | 3.9 |
| Value of world trade | | | | | | |
| Exports | -0.7 | 10.1 | 17.4 | 13.3 | 7.7 | 13.1 |
| Imports | -0.9 | 9.8 | 16.9 | 14.0 | 8.2 | 12.9 |
| Value of exports | | | | | | |
| World | -0.7 | 10.1 | 17.4 | 13.3 | 7.7 | 13.1 |
| Developed countries | 0.1 | 16.7 | 17.0 | 14.0 | 7.2 | 15.3 |
| Developing countries (including China) | -3.1 | -7.3 | 22.1 | 14.6 | 12.8 | 13.2 |
| Eastern Europe and and the USSR | 2.2 | 10.2 | 9.7 | 3.7 | -2.4 | -9.2 |
| Eastern Europe | 1.9 | 8.8 | 8.5 | 4.8 | -3.5 | -13.4 |
| USSR | 2.6 | 11.7 | 10.9 | 2.7 | -1.3 | -5.1 |

*Source*: UN/DIESA

[a] Preliminary estimate.

In respect of policies, there were both subtle and not-so-subtle changes in the international trade environment in 1990. Few of these developments bode well for the future of the liberal and multilateral trading system. A primary concern must be the eventual outcome of the Uruguay Round of multilateral trade negotiations, which failed to reach a widely expected agreement last December.

Protectionist tendencies strengthened in individual countries, accompanying the widespread economic slow-down. Also of concern is the continued call for "managed trade" or "result-oriented" trade policy and the tendency to substitute unilateral action for multilateral approaches to resolving trade problems. Yet another source of worry is the increased resort to bilateral and regional trade arrangements. These divide the world trading system into blocs, divert trade flows and diminish the multilateral approach to trade policy which has served the world economy so well in the period following the Second World War.

Some of the slow-down in world trade in 1990 was due to the great disruption and transition of economic and trade structures in Eastern Europe and the Soviet Union, where export volumes dropped by almost 10 per cent and 13 per cent, respectively. The export volumes of developed market economies and developing countries grew by some 5.5 per cent in 1990.

In terms of value in dollars, world trade increased to a record nominal value of US$3.53 trillion in 1990, up 13 per cent from the previous year. Much of this was due to the 8.5 per cent rise in the unit value of exports, mostly as a result of the depreciation of the dollar in 1990.

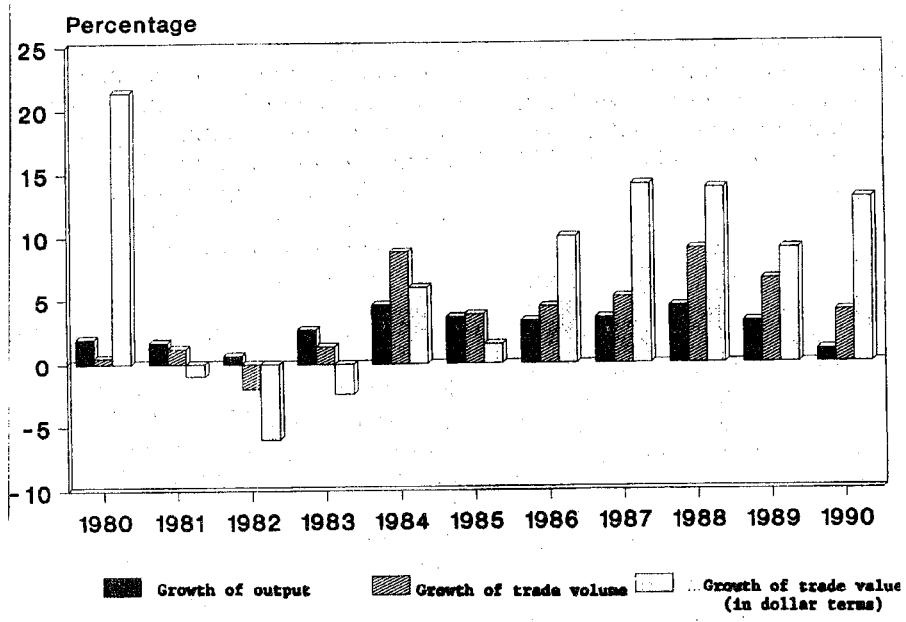
Price movements varied greatly. A sharp increase in energy prices boosted export unit values of the group of net energy exporters by over 15 per cent in 1990, compared to less than 10 per cent the previous year. On the other hand, for a number of developing countries, weak or declining commodity prices compounded the problem of sluggish volume growth. The same held true for a number of Eastern European countries, though the Soviet Union saw an increase in the unit value of its exports, chiefly due to increases in oil prices.

The prospects for 1991 are that the growth of global output and trade will slow for a third successive year and recover in 1992 as world output starts growing again. The upturn, in any event, is expected to be closely associated with the end of the recession in the United States of America. That country remains the largest world importer, with total imports well above $500 billion, or about 14 per cent of the world total. Overall, it seems probable that trade will continue to be one of the more dynamic elements in the world economy. For this very reason, there is less cause to be concerned by a two or three-year deceleration in the growth of world trade than by the current delay in concluding the Uruguay Round.

#### Sources of resilience

When compared to the substantial deceleration of world output, the expansion of trade in 1990 was remarkable. The driving force behind the relative vigour of world trade was the rapid increase in the import volume of Germany and other large economies of Western Europe (Belgium, France, Italy, Netherlands, Spain and United Kingdom of Great Britain and Northern Ireland), several developing economies in Asia (Hong Kong, Indonesia, India, Malaysia, Singapore, Republic of Korea and Thailand), some African economies (Algeria, Morocco, Nigeria) and a few Latin American economies (Peru and Mexico). The rate of growth in the volume of imports of Japan remained somewhat above the average for the world, as it has been since 1986. In Saudi Arabia and some of the other oil exporters in the Gulf area, the large increases in oil export revenues did not lead to a spurt in import demand as in the past. The additional funds were partly used as financial contribution to the coalition forces.

Figure III.1. Trade amd output, 1980-1990: change over preceding year




*Source:* UN/DIESA, based on national and international data.

On the export side, there was a rapid expansion in the export volume of the United States and the United Kingdom among the large industrial economies. The depreciation of the dollar helped exports of the United States whose volume grew by about 8 per cent. Japan, France and the Netherlands also increased its exports at a higher rate than world average: between 5.5 and 6.5 per cent. Among large developing economies, only Argentina, China, India, Malaysia and Thailand recorded export increases of 10 per cent or above.

World trade decelerated in the second half of the year as the United States economy entered into recession and other large developed economies weakened, economic sanctions affected import demand from Iraq and Kuwait, and the decline or sluggishness of imports of Eastern European countries and the USSR became more pronounced.

### The Uruguay Round

The Uruguay Round of multilateral trade negotiations resumed last February after being suspended in December 1990. After four years of bargaining, the talks had ended partly because farm-exporting nations, led by the United States and the Cairns Group,[1] clashed with the European Community over reforming agricultural policies. However, in this complex negotiation, new sectors and issues have been added to the traditional ones and will have to enter into the bargain. It is now hoped that agreement will be reached before the end of 1991, but this cannot be taken for granted.

As world output growth slows and competition from emerging exporters grows, some domestic producers in developed market economies seem to have become increasingly wary of trade liberalization measures and to be inclined to fight for protection under a variety of trade laws which provide relief from import competition. Such tendencies make far more difficult the task of renewing and strengthening the General Agreement on Tariffs and Trade (GATT) system. The current recession in several countries and slow-down in others complicate the ability of the negotiating authorities to conclude multilateral trade negotiations.

## Trade flows and trade balances among country groups

The developed market economies buy more than two thirds of the world's exports (see table A.17). Eastern Europe and the Soviet Union account for less than 10 per cent of world imports, and the share of the developing countries is less than one quarter. In 1980, the developing countries had purchased almost 30 per cent of the total, which reflects, first, the changing fortunes of the oil- exporting countries (e.g., West Asia's share went from 11 per cent in 1980 to 3 per cent in 1989, the last year for which comprehensive data are available). The declining share also reflects the decade of constraints on the growth of imports and

[1] The Cairns Group consists of 14 mostly developing countries, co-ordinated by Australia, which together account for about one quarter of the world's agricultural trade. The members are: Argentina, Australia, Brazil, Canada, Chile, Colombia, Fiji, Hungary, Indonesia, Malaysia, New Zealand, Philippines, Thailand, Uruguay.

output in Africa and Latin America (their shares falling from almost 5 per cent to 2 per cent and from about 5.5 per cent to 4 per cent, respectively). Only developing Asia has seen its share of world imports grow over the 1980s (from 8 to 13 per cent). Thus, the growth of world exports in 1990 was concentrated on expanding sales to developed market economies, to developing Asia and to the oil-exporting countries whose export revenues had risen on the strength of oil price increases in 1989 and 1990.

### Developed market economies

With strong export links to each of the groups of economies whose import demand grew substantially last year, the volume of exports of the developed market economies grew 5.4 per cent (see table A.20). These economies ship about three quarters of their exports to each other (table A.16), and so their export volume generally grows by about the same amount as their imports. Last year, imports grew slightly more slowly, however, at about 5 per cent, the difference being made up by rising sales to OPEC member countries and to countries maintaining a rapid rate of import growth, the South-East Asian and East Asian exporters of manufactures.

Import demand in the developed market economies weakened with the slow-down in the economic growth rate of the grouping, which was discussed in chapter II. The sharpest import slow-down thus took place in North America, which was in recession by the end of 1990; the smallest slow-down was in Europe. The economic, and then political, integration of the six eastern *Länder* into Germany boosted the import demand of the former Federal Republic of Germany by 11.5 per cent in volume terms, in contrast to a 7.5 per cent increase in 1989. As a result, the import volume of the European Community grew about 7 per cent last year, down only slightly from the 8.5 per cent figure of 1989.[2]

With much of Europe's growth of demand concentrated in Germany itself, the volume of western Germany's exports hardly grew at all (1.5 per cent), compared to 7.5 per cent the year before. Nevertheless, Germany became the world's largest exporter in 1990, surpassing the United States, despite the fact that the latter's exports grew 8.5 per cent in volume terms.[3] The reason was only in part that the $22.5 billion in exports of the former German Democratic Republic could be added to those of the former Federal Republic to reach a $421 billion combined German total for 1990. Even without the eastern *Länder*, Germany's exports would have exceeded those of the United States because the deutsche mark rose about 16.5 per cent against the dollar last year and the data are denominated in dollars by convention.

The exchange rate changes of recent years have been, in fact, an important contributor to the slow-down in the growth of German exports and acceleration in the growth of the exports of the United States. The real effective exchange rate of the deutsche mark against Germany's industrial country trading partners, which had been virtually constant from 1987 to 1989, rose 6 per cent last year, while that of the dollar dropped 9 per cent.[4] By the same token, Japan maintained a 5.5 per cent growth of export volume last year despite the sharp slow-down in its North American markets in part because the real effective exchange rate of the yen fell 12.5 per cent, after a 5 per cent fall in 1989 from the 1988 peak (see table A.9).

The net effect of these various price and income effects on exports and imports of the industrial countries has been to help reduce further the large-scale imbalances in trade that have been a focus of policy attention for several years. As table III.2 shows, the large trade deficit of the United States continued to shrink in 1990 (indeed, without the rise in oil prices the decline would have been significantly greater), but it remained close to $110 billion. The surpluses of Germany and Japan also fell, but their combined surplus was still $136 billion. As the preceding dis-

Table III.2. Developed market economies: trade balance[a], 1980-1990

(Billions of US dollars)

| | 1980 | 1982 | 1984 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|
| All developed market economies | -69.5 | -25.9 | -46.9 | -3.7 | -23.0 | -7.3 | -28.5 | -31.6 |
| Seven major industrialized countries | -33.7 | 0.4 | -46.7 | 0.8 | -11.0 | 9.3 | -6.3 | -8.8 |
| Germany | 8.7 | 24.7 | 22.2 | 55.8 | 69.8 | 79.4 | 76.7 | 71.9 |
| Japan | 2.1 | 18.1 | 44.3 | 92.8 | 96.4 | 95.0 | 76.9 | 63.9 |
| United States | -25.5 | -36.4 | -112.2 | -145.1 | -159.5 | -127.0 | -114.9 | -108.7 |
| Other developed market economies | -35.8 | -26.3 | -0.2 | -4.6 | -12.0 | -16.5 | -22.2 | -22.8 |

*Source*: Annex table A.23.

[a] On an f.o.b. basis.

[b] Preliminary (based, in part, on Secretariat estimates).

[2] Estimates of the secretariat of the General Agreement on Tariffs and Trade, Press communiqué No. 1504 (19 March 1991), p. 10.

[3] The third largest exporter was Japan, followed by France, the United Kingdom, Italy, the Netherlands, Canada, Belgium-Luxembourg and the Soviet Union (ibid., pp. 12-14).

[4] Based on data in table A.9, which estimates the net effect of changes in wages and productivity in 15 partner countries; see also the changes in nominal effective exchange rates against a larger sampling of trading partners in table A.9.

billion. The surpluses of Germany and Japan also fell, but their combined surplus was still $136 billion. As the preceding discussion might suggest, however, exchange rate changes in part masked movements that were occurring in real trade terms.

Although trade balances are essentially macroeconomic phenomena, reflecting the greater part of the net transfer of financial resources (see discussion in chapter IV below), they are also the sum of exports and imports of hundreds of individual commodities. Trade balances are thus often seen by policy makers—and the lobbyists for particular industrial and agricultural interests—as evidence germane to the question of fairness of competition in particular countries and in particular sectors. As the trade imbalances of the major industrial countries have been closing only slowly, they have helped to give a sense of legitimacy to the frustrations in competition at the microeconomic level and the frictions over trade policies that limit international competition in individual products.

The degree to which the Japanese domestic market is open to imports is a case in point. Japan's critics maintain that although Japan participated in the various rounds of tariff-cutting under GATT, the Japanese market remained largely closed to foreign manufacturing and agricultural products, and that this explains the continuing Japanese trade surplus. Formal tariff protection (or explicit quotas) were not at issue since, as table III.3 shows, Japan's tariff levels are low. Rather, the argument is that Japan's uniquely low level of import penetration compared to the rising import penetration elsewhere in the developed market economies suggests that Japan has been using policy to keep out foreign goods (see table III.4). On the other hand, a number of studies of Japan's import performance have found that it is not abnormally low, but roughly what might be expected in view of Japan's lack of natural resources, its resource endowments and its productivity in manufacturing.[5] In either case, the reality is that a long series of negotiations takes place outside the GATT framework, especially between Japan and the United States, aimed at enhancing access of foreign producers to the Japanese market (see below). Meanwhile, the Japanese trade surplus shrinks at a pace determined by other factors.

Table III.3. Post-Tokyo Round average most-favoured-nation tariff rates[a] (percentage)

| | Raw materials | Food items | Manufactures |
|---|---|---|---|
| USA | 0.3 | 4.1 | 4.2 |
| Japan | 0.7 | 9.7 | 11.9 |
| Canada | 0.6 | 6.2 | 3.8 |
| EEC | 3.4 | 3.7 | 10.2 |

*Source*: Finger, J. Michael and Andrzej Olechowski, eds., *The Uruguay Round: A Handbook on the Multilateral Trade Negotiations* (Washington, D.C., World Bank, 1987).

[a] Figures are post-1979.

Table III.4. Import penetration in manufacturing: apparent consumption, 1975-1985 (percentage)

| | 1975 | 1980 | 1985 |
|---|---|---|---|
| Canada | 19.5 | 30.6 | 38.7 |
| Germany | 22.9 | 27.7 | 31.7 |
| UK | 14.2 | 25.3 | 33.2 |
| USA | 5.5 | 9.3 | 12.9 |
| Japan | 4.7 | 5.8 | 5.3 |

*Source*: OECD, "The OECD compatible trade and production data base: 1970-85" (Paris, 1988). Mimeograph.

### Developing countries

The value of exports of developing countries as a whole grew by more than 12 per cent in 1990, largely on account of the increase in oil prices in the second half of the year. The value of merchandise imports increased some 10.5 per cent (see table A.25). This raised the trade surplus of the group from $46 billion to roughly $61 billion. (See table III.5).

In energy importing countries, the trade balance experienced a major reversal in 1990 because of a large increase in the unit value of imports (manufactures and fuels) and a fall in the unit value of exports that affected most countries in the group. Thus, the adjustment efforts that a large number of these countries were undertaking to improve their balance of payments were frustrated once more by a large loss in the terms of trade. The trade balance of the energy importing countries as a group swung from a surplus of $4 billion in 1989 to a deficit of $15 billion in 1990 (see table III.5).

In Africa, the value and volume of exports increased. The gains were mostly concentrated in oil exporting countries. Sub-Saharan Africa (excluding Nigeria) increased the volume of its exports by 5 per cent, which is more than double the annual average of the 1985-1989 period. However, decreasing commodity prices turned that into a slight decline in export revenues. The rate of increase of the volume of exports in Latin America as a whole was quite weak for a second consecutive year: barely 2 per cent. A main reason for this lackluster performance was a decline of more than 10 per cent in Brazilian exports. Yet, export promotion efforts and more realistic exchange rates resulted in large export increases in more than ten countries in this region.[6]

Despite the fact that the exports of the Republic of Korea virtually stagnated in 1990, the volume of exports of the developing economies in South and East Asia grew by over 6 per cent. The increase in export revenues was remarkable for a large number of these countries, particularly at a time of a weak worldwide growth and depressed commodity prices. At least a dozen countries or areas in the region saw their export revenues rise

[5] See, for example, Jagdish Bhagwati, *The World Trading System at Risk* (Princeton, New Jersey, Princeton University Press, 1991), pp. 36ff.

[6] Argentina, Bolivia, Colombia, Chile, El Salvador, Guatemala, Nicaragua, Panama, Paraguay, Uruguay and Venezuela increased the volume of exports between 8 per cent and 20 per cent in 1990. See Economic Commission for Latin America and the Caribbean, *Preliminary Overview of the Economy of Latin America and the Caribbean* (Notas sobre la econom2a y el desarrollo, No. 500/501, December 1990).

Table III.5. Developing countries: trade balance,[a] 1980-1990
(Billions of US dollars)

| | 1980 | 1982 | 1984 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|
| All developing countries | 112.6 | 29.0 | 64.0 | 12.8 | 48.7 | 35.9 | 46.4 | 61.4 |
| Surplus-energy exporters | 140.8 | 60.6 | 36.0 | 8.4 | 20.3 | 16.7 | 30.4 | 43.2 |
| Deficit-energy exporters | 32.3 | 9.6 | 35.4 | 8.8 | 23.4 | 10.0 | 17.7 | 26.2 |
| Energy-importing countries | -57.8 | -45.5 | -7.3 | 4.8 | 6.6 | 14.6 | 3.9 | -15.0 |
| of which: | | | | | | | | |
| Newly-industrializing economies | -9.2 | -7.4 | 6.5 | 19.1 | 25.4 | 22.4 | 19.3 | 9.6 |
| China | -2.8 | 4.2 | 0.0 | -9.1 | -1.7 | -5.3 | -5.6 | 7.0 |

*Source*: Annex table A.25.

[a] On an f.o.b. basis.

[b] Estimate.

by 12 per cent or more.[7] Export dynamics is not concentrated in the newly industrializing economies of the region any longer. Exports of Indonesia, Malaysia and Thailand already exceed $20 billion after a vigorous growth in the second half of the 1980s. Moreover, virtually all countries on the Indian subcontinent experienced large increases in the value of merchandise exports in 1990, confirming a trend prevailing since 1987. In West Asia, export volumes barely increased as the marked expansion in exports of Saudi Arabia was largely compensated by the decline in exports of Iraq and Kuwait.

The rate of increase in the volume of imports of developing countries decelerated considerably. It had been over 8 per cent in 1989 and reached only 2 per cent in 1990 (see table A.20). The purchasing power of exports in energy-importing countries did not grow much, partly because of the large increase in the unit value of their imports. In several of the energy exporting countries, the additional resources from higher oil prices went to cover financial contributions to the coalition forces and this reduced the scope for imports. On a geographical basis, imports weakened considerably in Africa, the Mediterranean, and parts of Asia, including West Asia. In sub-Saharan Africa (excluding Nigeria), the volume of imports declined somewhat, but in Latin America the volume increased by close to 8 per cent. This was mostly due to a spurt in imports of energy exporting countries, particularly Mexico and Peru, and some recovery in Venezuela after an import fall of more than 40 per cent in 1989. In the rest of Latin America, the volume of imports grew at a mere 3 per cent rate. This implies that per capita imports of energy importing countries in Latin America are still less than three quarters of the 1980 level.

On the whole, international trade has continued to provide some stimulus to growth, particularly to developing countries which export manufactures and fuels. While no significant growth impetus can be expected in 1991, exports of developing countries should improve in 1992. This is particularly important as net financial transfers are unlikely to expand much, and most developing countries need to end the import compression to invest and grow. Nevertheless, the problem of many countries - inability to increase export revenues - will remain, unless they succeed in diversifying and deliver increasing volumes of merchandise for exports. Diversification or else a switch to export commodities that have a higher income elasticity appear necessary to break the trend towards deteriorating terms of trade that has affected a large number of countries since 1980. In this context, the question of market access to developed countries remains critical.

### Countries hit by the trade embargo

Soon after the invasion of Kuwait by Iraq, the United Nations Security Council approved a trade embargo against Iraq. For world trade in goods and services as a whole, the effects of the trade embargo were small, given that Kuwait and Iraq together accounted for less than 1 per cent of world merchandise trade. Freight costs increased owing to higher fuel prices and insurance prices went up, but it is unlikely that the higher cost of transport, together with the trade embargo, had more than a half percentage point impact on the overall level of world trade in 1990.

Country-specific effects of the embargo, however, were very large in some cases. For only half a dozen countries, mostly developing countries, the share of merchandise exports to Iraq and Kuwait in total merchandise exports was over 1 per cent (Brazil, India, Jordan, Romania, Turkey, Yugoslavia). For a few more, this share was between 0.5 and 1 per cent (Australia, Bulgaria, Czechoslovakia, Germany, Italy, Saudi Arabia, Spain, Switzerland, United Kingdom), and therefore they were only slightly affected by the loss in trade from the embargo.

Jordan was clearly the most adversely affected country, since Iraq and Kuwait represented about 20 per cent of its export markets in 1989. It was followed by Turkey (for which the corresponding figure was 9 per cent), Romania (4 per cent), India (nearly 3 per cent) and Yugoslavia (2.4 per cent).

[7] The increase in export revenues varied between 12 per cent and 18 per cent in Bangladesh, Fiji, Hong Kong, India, Indonesia, Lao People's Democratic Republic, Malaysia, Nepal, Singapore, Sri Lanka, Thailand and Viet Nam in 1990. In Myanmar the corresponding figure was close to 30 per cent. See Asian Development Bank, *Asian Development Outlook 1991* (Manila, April1991).

The impact of the embargo and of the Gulf crisis on trade in services was equally uneven. Tourism, in particular, suffered world-wide in 1990, and even more so in the first quarter of 1991, from the combined effect of recession, higher fuel prices and the perceived risk of air travel. Final numbers are not available yet, but there are estimates of a 20 to 25 per cent decline in overall travel earnings during the southern hemisphere's summer season. In the Gulf region, of course, the decline in tourism was directly related to the conflict. Apart from Iraq and Kuwait, the heaviest losses were incurred by Cyprus, Egypt, Israel, Jordan, Kenya, Malta, Morocco, Tunisia and Turkey.[8]

### Trends in trade in manufactures

In the latter part of the eighties, manufactured exports have dominated the growth of world merchandise trade. World manufactured exports have increased much faster than world manufacturing production.

Developing countries as a whole have been extremely successful in exporting manufactures, with a trend rate exceeding that of the developed countries (see figure III.2). In the 1970s, the volume of exports of manufactures from these countries more than tripled, and in the 1980s it grew at similar rates.

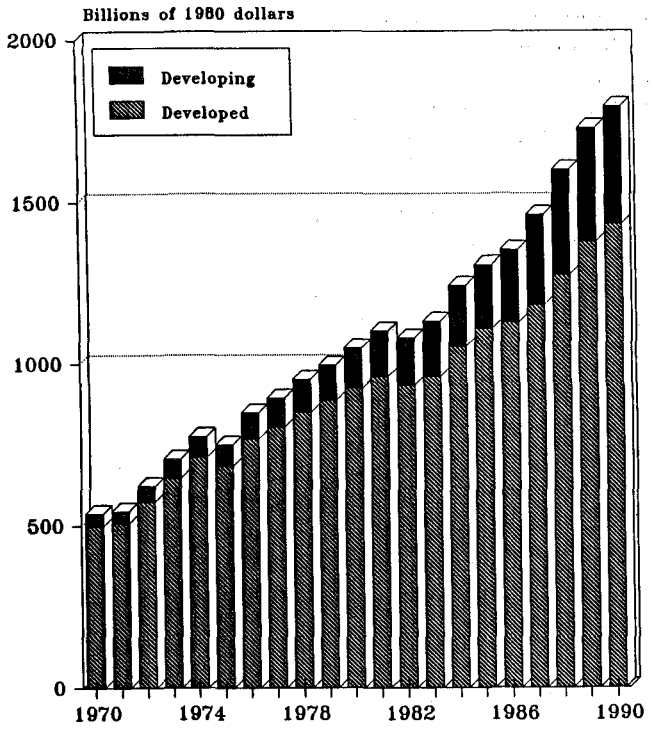
The upshot has been that for the world as a whole, between 1980 and 1988, the share of manufactures in total export value increased from 54 to 70 per cent (see table A.18). For developing countries, the comparable shift was from 19 per cent to 52 per cent, almost a threefold increase. Thus, manufactures now account for more than half of total developing country exports.

The developing country growth in manufactured exports has been across the spectrum of industries. By the end of the 1980s, these countries accounted for almost half of world textile exports, owing particularly to the strength of exports from South and East Asia, which alone accounted for one third of the world total (see again table A.18). The developing country share of exported machinery and transport equipment doubled in the 1980s and became a factor in the world market, again principally on the strength of exports from Asia. In the case of other metal manufacturers, Latin American exports as well as those of Asian countries doubled their share of the world total. In several industries, developing country brand names on national imprints are increasingly familiar in industrial country markets.

In contrast, the developing countries have just maintained their share of world exports in other sectors, including food and ores and metals (about 30 per cent or less); or their share declined, most prominently in fuels, which dropped from almost three quarters in 1990 to little over half in 1988, a trend that is not expected to be maintained in the 1990s (see chapter V).

Many developing countries or areas are moving from exports of agro-industrial products, processed minerals and textiles and clothing to chemicals and machinery and transport equipment. Today, for example, Brazil, Hong Kong, Malaysia, the Republic of Korea, Singapore, Taiwan Province of China and Yugoslavia have exports of machinery and transport and other equipment that well exceed 20 per cent of their total exports,

Figure III.2. Exports of manufactured goods, 1970-1990




*Source:* UN/DIESA.

while other countries are expanding into industries formerly occupied by other developing countries (see chapter II).

### Eastern Europe and the Soviet Union: economies in transition

**Foreign trade developments in 1990.** The export volume of Eastern Europe and the Soviet Union declined roughly 13 per cent last year, while regional imports fell by some 4 per cent.[9] The predominant part of this downturn was the result of the contraction in trade among member countries of the Council for Mutual Economic Assistance (CMEA). Soviet exports to Eastern European countries declined some 20 per cent, and Soviet imports from Eastern Europe by 6 per cent in volume terms. The volume of exports among the other Eastern European countries fell about 25 per cent, reflecting the severity of the recession described in chapter II, the impact of German unification and the failure of the settlements arrangements for intra-group trade. Intra-East European import volume fell by almost 20 per cent.

In trade with the developed market economies, Soviet exports increased by 4 per cent in volume terms, Eastern Europe's by some 12 per cent. However, while the volume of Eastern European imports grew even faster, by 17 per cent, the Soviet Union experienced a decline of over 1 per cent in the volume of imports from developed market economies. The drop in both Eastern

[8] See *Focus: GATT Newsletter*, No. 80 (April 1991). See chapter II for the economic impact of the Gulf crisis on individual countries.

[9] Excluding the former German Democratic Republic.

Europe's and the Soviet Union's export volume to the developing countries was especially large.

**The current account.** The Soviet trade deficit deteriorated sharply. According to data reported by the USSR, the overall trade deficit reached $17 billion, a staggering figure after the $5.4 billion deficit of 1989 (see table III.6). The deterioration was not spread over all major partner country groupings. The Soviet Union substantially increased its deficit with Eastern Europe and other socialist countries by about $13billion from roughly $3.5 billion in 1989.[10]

Substantial exchange rate differentials in the rouble per United States dollar cross rates among the Eastern European countries may, however, distort calculations of their trade balances. For example, Bulgaria and the Soviet Union used a 0.6 rouble/dollar exchange rate. Poland, however, calculated its transferable rouble trade flows with a cross rate of 4.52 rouble/dollar. Therefore, the changes in value which are based on officially reported data do not form a consistent whole, reducing the accuracy of the picture of developments in intra-CMEA trade. In order to filter out different national practices in setting rouble exchange rates, a calculation using a unified exchange rate of 2 rouble/dollar has been carried out by the Economic Commission for Europe.[11] For the Soviet Union, this more realistic recalculation would have shown an overall trade deficit of $0.96 billion in 1989, as opposed to the aforementioned $5.4-billion based on national reports. In 1990, using the same computation system, the Soviet Union's trade deficit was $6 billion, compared to the "officially reported" $17.1 billion. This $6 billion trade deficit consisted of a $4.6 billion estimated deficit with other CMEA countries, as well as a $1.3 billion deficit with the market economies. Hence, based on unified accounting, last year the Soviet deficit from intra-group trade was twice the level of 1989, a change from $2 to $4.6 billion.

Table III.6. Eastern Europe and the Soviet Union: trade balance, 1980 and 1987-1990 (Billions of US dollars)

| | 1980 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|
| Eastern Europe | | | | | |
| World | -5.7 | 3.0 | 6.1 | 5.4 | -2.2 |
| Intra-group[a] | -1.8 | 0.2 | 2.9 | 2.8 | 1.1 |
| Developed market economies | -3.7 | 0.5 | 0.3 | 1.0 | -3.7 |
| Developing countries | -0.2 | 2.3 | 2.9 | 1.6 | 0.4 |
| Soviet Union | | | | | |
| World | 8.0 | 11.7 | 3.4 | -5.4 | -17.1 |
| Intra-group[a] | 5.1 | 3.7 | -0.3 | -3.5 | -16.2 |
| Developed market economies | 0.2 | 0.5 | -2.7 | -6.5 | -4.8 |
| Developing countries | 2.7 | 7.5 | 6.4 | 4.6 | 3.9 |
| Total | | | | | |
| World | 2.3 | 14.7 | 9.5 | 0.0 | -19.3 |
| Intra-group[a] | 3.3 | 3.9 | 2.6 | -0.3 | -15.1 |
| Developed market economies | -3.5 | 1.0 | -2.4 | -5.5 | -8.5 |
| Developing countries | 2.5 | 9.8 | 9.3 | 5.8 | 4.3 |

*Source*: UN/DIESA, based on national data.

[a] China, Eastern Europe (including the former German Democratic Republic), USSR, Viet Nam and other Asian planned economies.

**Collapse of intra-CMEA trade.** The contraction in intra-CMEA trade reflects the fact that trade and payment relations within Eastern Europe have been burdened by several developments. First, these economies have failed to clear their mutual trade since early 1989; and commitments made under various trade and payments agreements have not been honoured. Second, there have been unanticipated developments as regards domestic output and shifting export priorities, including problems with Soviet energy supplies; the result has been the introduction of new bilateral price arrangements and intergovernmental trade protocols, in order to curtail exports in transferable roubles. Third, differences in the pace and nature of political and institutional change in these economies have affected intra-group trade and payment relations. Countries undertaking structural adjustment to phase out unprofitable production will have less trade in such products. Lastly, the rapid and harsh consequence of German monetary and political unification introduced another shock to the area's foreign trade system (see below).

Under the old CMEA system, the Soviet Union partly subsidized its partners. The prices of Soviet oil and oil products were held at low levels, while the machinery that Eastern Europe sold to the Soviet Union was relatively expensive. Interest-free loans were de facto extended by maintaining surpluses in a non-convertible currency, generally the transferable rouble.

Based on the criticism expressed during the forty-fifth session of the CMEA in Sofia in January1990, a special committee was set up to consider proposals of member countries on its recon-

[10] Not including Cuba, the Lao People's Democratic Republic and Yugoslavia, all of which are counted with the developing countries.

[11] See Economic Commission for Europe, *Economic Bulletin for Europe*, vol. 42 (November 1990) p. 31, box 2.1.

struction. Several countries called for a completely new organization of a consultative character and based on regional cooperation.[12] Other member countries have suggested only reorganization. After several rounds of negotiations, a final decision is slated for 28 June1991, in Budapest.

Several proposals for a regional monetary integration have been put forward and debated in the past year, including one proposal for a Central European payments union.[13] However, a new regional trade and payments arrangement, geared toward sustaining some intra-CMEA trade, appears unlikely. First, the Soviet Union might not be part of such an agreement; second, there are no large imbalances in mutual trade among the smaller Eastern European economies warranting a new payments arrangement. Third, in case currency convertibilities are established soon, current monetary problems will tend to diminish. Last but not least, the political will required for a regional monetary arrangement is still lacking in all of these economies.

**Transition to a new system.** The introduction of hard-currency trade and payments accounting in intra-group relations is very complex. In the bilateral agreements already concluded, it appears that market prices are used when, and if, they can be easily identified, while contract prices negotiated by those involved will be applied whenever possible. A second issue involves hard-currency settlements. In some cases, a gradual introduction of convertible currency transactions is foreseen.[14] According to the Polish-Soviet agreement, 15 per cent of all accounts were to be settled in hard currency, at least in 1990. No detailed agreements yet exist with other countries.

The most substantial problem pertains to the level and composition of bilateral trade. As pointed out above, Soviet exports with Eastern Europe are shrinking. Simultaneously, these economies have announced reductions in their supplies to the Soviet Union. Bulgaria, for example, will reduce its exports to the USSR by 15 per cent. Hungary, which had originally planned to reduce its exports to the Soviet Union by 20 per cent, revised the figure to 12 per cent,[15] but then announced deeper cuts in export deliveries in early 1991.[16] As a result the Soviet Union's share in Hungary's overall trade declined from 23 per cent in 1989 to 18 per cent in 1990. The Soviet Union had a 43 per cent share in Czechoslovakia's exports in 1989, and this share in 1990 was down to 23 per cent.[17]

In the first months of 1991 the situation regarding intra-Eastern European payments is very unsettled. Almost nothing has been agreed on the "how" and "when" of bilateral Soviet-Eastern European payments. While the previous system of immediate payment has ceased to exist,[18] a new payment scheme has not yet been mutually accepted. In the old payment system, there was no need to provide credit to finance export deliveries. Beginning this year, this will be a necessity. In the case of very frequent delays in payments by the importers, enterprises will be required to refinance their outstanding trade deliveries. In some CMEA countries, the central bank increased credit volume for this purpose.[19]

There has been a pronounced attempt on the part of the Eastern European economies to have the Soviet importer - be it a central foreign trade organization, a republic, local government, or an enterprise - open a hard currency account in the country of origin.[20] So far this has met with little success. Owing to the belated reforms and serious foreign exchange shortages in the Soviet Union, economic units are still unclear as to how much hard currency will be allocated to them in 1991. It is no wonder, then, that even already committed export deliveries are being withheld.

The lack of a payments systems is thus dramatically affecting the traditional exporters to the Soviet Union, which happen to be Eastern Europe's largest manufacturing enterprises. In every country these enterprises have engaged in intense lobbying in an attempt to persuade their governments to relax the new restrictions and procedural rules. They have succeeded in varying degrees.[21] It is, however, already a fact that inter-enterprise indebtedness in the countries of Eastern Europe has increased, partially owing to problems encountered in receiving payment for their export deliveries to other Eastern European countries. Particularly painful for the smaller Eastern European contractors has been the frequent inability of Soviet importers to pay in hard currency.[22]

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[12] From the sparse discussion of the issue in the press it would appear that such an organization would not accommodate non-European members - namely Cuba, Mongolia and Viet Nam.

[13] *Economic Survey of Europe in 1989-1990*, (United Nations publication, Sales No. E.90.II.E.1), pp.144-150; and *World Economic Survey 1990* (United Nations publication, Sales No. E.90.II.C.1), New York, 1990, p.98.

[14] The Bulgarian-Soviet agreement concluded in January 1990, provides for cuts of about 15 per cent in mutual trade for the year 1990, along with the gradual implementation of hard-currency settlements, as of January 1991. For three years both the transferable rouble and the dollar would be used in the transactions, but no further explanation of the actual mechanism to be applied has been provided.

[15] *Népszabádsg* (Budapest), 13 March 1990, p. 3.

[16] According to the Minister of International Economic Relations, even a 50 to 70 per cent drop in Hungarian-Soviet trade is possible in 1991. *N*pszabadsg* (Budapest), 25 February 1991, p. 1.

[17] *Népszabádsg* (Budapest), 1 March 1991, p. 6.

[18] Upon exporting some goods to the CMEA, the exporter had the bill of lading cleared by the central bank of the country and immediately received payment in national currency. The central bank received the actual transferable rouble amount through the International Bank for Economic Cooperation via regular clearing arrangements.

[19] The National Bank of Hungary increased this type of credit by 20 per cent compared to 1989. *Magyar Hírlap* (Budapest), 25 January 1991, p. 9.

[20] In Hungarian-Soviet bilateral trade, Hungarian exports are slated to be $1.7 billion in 1991. Contracts have been signed for $900 million, and export production realized to the tune of $200 million. The Soviet partners, however, have opened accreditive accounts in Hungary for only a couple of million dollars. If this is the situation with indicative or agreed flows, one can only imagine the problems inherent in trade beyond. *Figyelö* (Budapest), 28 February 1991, p.9.

[21] The largest bus manufacturing company, Ikarusz in Hungary not only had to stop exports to the Soviet Union, but reduced the work week by 25 per cent in order to be able to keep its employees. *Magyar Hírlap* (Budapest), 6 February 1991, p. 3.

[22] See chapter IV of the present *Survey*.

**The effects of the unification of Germany.** The former German Democratic Republic has been historically the second most important trading partner - after the Soviet Union - for most of the countries of Eastern Europe. After unification, Germany has become their most important trading partner, while trade with the Soviet Union is still shrinking. But the German currency union of July 1990 has caused problems in intra-CMEA trade. To begin with, there were several changes in the exchange rate system. With unification, the special conversion unit - the Valutamark - disappeared. Until June 1990, enterprises in the German Democratic Republic received 4.667 marks for each transferable rouble earned in export to the CMEA region. In June 1990, it was decided that for each transferable rouble earned in such trade, 2.34 deutsche mark would be given. This implied a rate of M2 to DM1 as compared with the one-to-one exchange rate of the deutsche mark and the mark that had been used to convert wages, pensions, and a limited amount of savings. All other assets have been converted at the rate of M2 to DM1.

Article 13 of the State Treaty between the Federal Republic of Germany and the German Democratic Republic specifies that contractual obligations toward the countries of CMEA are to be respected. The commitment, however, has been acted upon only as regards trade with the Soviet Union. Even so, the Soviet agreement with the German Democratic Republic of 18 July 1990 does not spell out details on the way these commitments are to be met. It is possible, for example, that the Soviet Union will use part of the DM 5 billion guaranteed loan it obtained from the Federal Republic of Germany in May 1990 to pay off part of its debt to the former German Democratic Republic.

A reduction of mutual trade between the former German Democratic Republic and Eastern Europe is already a fact. After unification, German enterprises turned down a series of import contracts, thereby "exporting" part of the shock of the German adjustment. Export contracts, however, were not cancelled in the same proportion. The result of this was a substantial rouble surplus at the end of 1990, mostly with the Soviet Union.[23] Hefty claims for the compensation of losses stemming from the cancellation of export orders were announced by Czechoslovakia, Hungary and Poland. From press information it seems that the Hungarian claim amounted to more than DM 450 million,[24] a sum Germany is apparently ready to pay.[25] Non-commercial relations have also been affected: as of 1 July 1990 all tourist agreements with other CMEA member countries have been abrogated, soft currencies of CMEA tourists have not been exchanged, and tourists have been required to pay their bills in deutsche marks.

## Commodities

Primary commodities continue to be the mainstay of a large number of developing countries. Despite the sharp reduction in their share over the last two decades, by the end of the 1980s non-fuel commodities accounted for over 40 per cent of the total exports of developing countries other than the fuel exporters and the major exporters of manufactures.[26] The volume of exports of these commodities continued to increase fairly rapidly in the second half of the 1980s, partly in response to higher demand in the industrial economies, which was not, however, high enough to lift commodity prices of the United Nations Conference on Trade and Development (UNCTAD), significantly from the record low they had fallen to by mid-decade. The ineffectiveness of most commodity agreements, continuing over-supply of some products, and the ongoing fall in the materials intensity of output in industrial countries contributed to the persistent weakness of commodity prices.

After a sharp increase in 1988 from the historic lows of the mid-1980s, commodity prices reached a plateau in 1989, but declined once again last year. The combined dollar price index of non-fuel commodity exports of developing countries declined by about 6 per cent in 1990. Since the dollar depreciated against other major currencies in 1990, this understates the fall in commodity prices even in nominal terms. The combined SDR index of prices declined by some 11 per cent. In real terms, i.e. in terms of manufactures they would buy, commodity prices declined even more sharply, by about 15 per cent (see table A.21). This was one of the steepest falls in recent years, which brought down the average real prices of non-fuel commodities close to the level of 1987, the lowest since the 1930s. There was little sign of recovery in 1991. In the first quarter of the year nominal prices were 4 per cent lower in dollar terms and about 10 per cent lower in SDR terms.

The decline in commodity prices in 1990 was fairly pervasive. About 60 per cent of the commodities in the index of commodity prices of the United Nations Conference on Trade and Development (UNCTAD), including some of the major exports of developing countries, showed a decline. Among the five major categories of exports in this index, only agricultural raw materials registered an increase in prices (figure III.3).

Among the food items, rice prices declined by some 10 per cent, while prices of sugar remained practically unchanged. Prices of tropical beverages fell further. Prices of coffee, which is the largest single item of non-fuel primary exports of the developing countries, declined by over 20 per cent on the average to the lowest level since 1986. Prices of cocoa, the second most important item in the group, barely increased in dollar terms from their record low level of 1989.

Mineral and metal prices showed some diversity of trends, but declined on average. Prices of copper, the most important commodity in the group, declined, though only modestly, for the year as a whole after a significant increase in 1988 and 1989. Aluminium prices declined by some 15 per cent, while iron ore and manganese prices rose, the latter substantially.

In contrast to non-fuel prices, oil prices increased sharply in 1990, as a consequence of the Gulf conflict. Prices, on average, rose by about 27 per cent over their 1989 level (see chapterV).

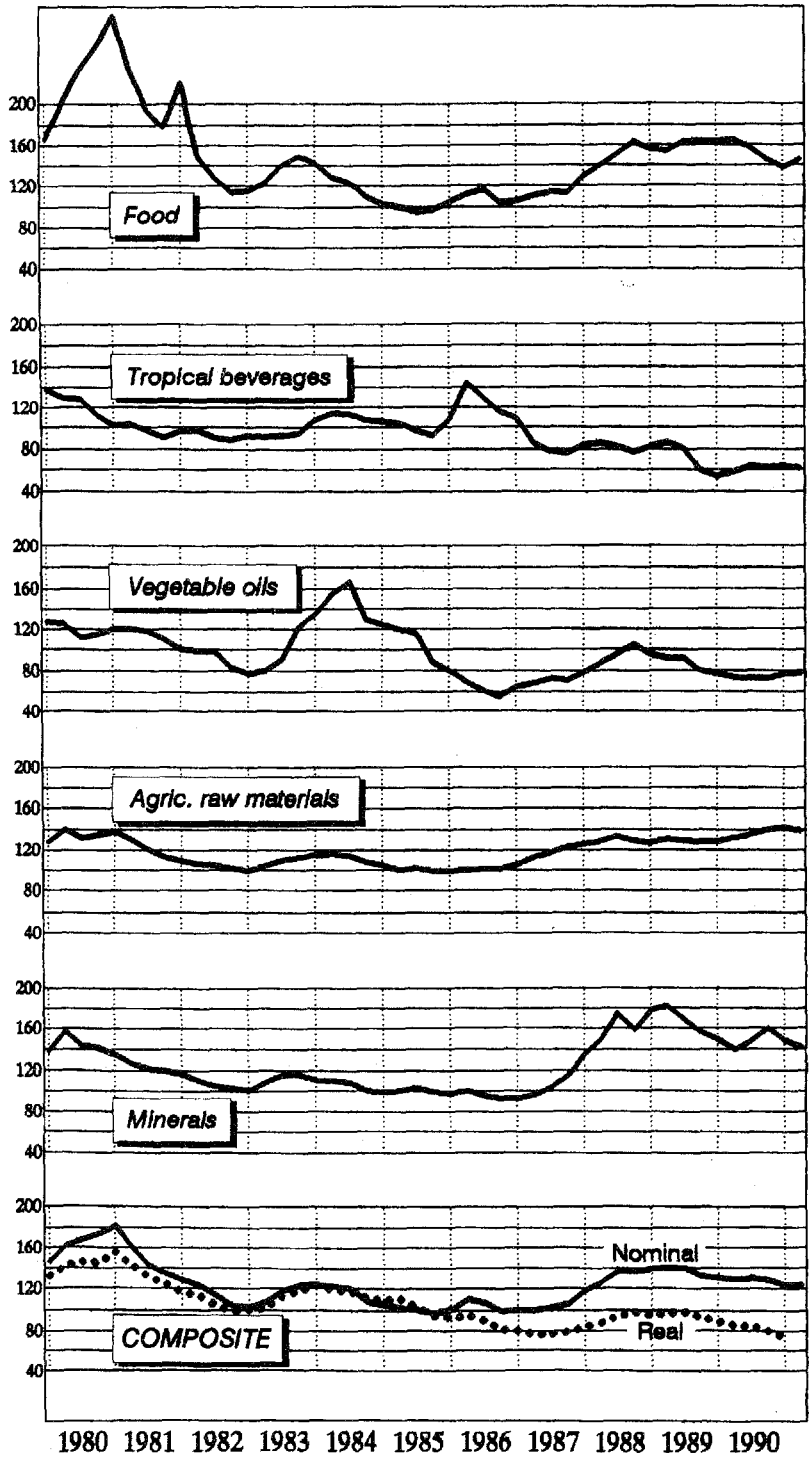
[23] Final 1990 trade data for the Eastern part of unified Germany are not yet available. Three quarters data for 1990 show a 4.8 billion transferable rouble trade surplus. See Economic Commission for Europe, *Economic Bulletin for Europe*, vol. 42 (November 1990) p. 36, table 2.5.

[24] *Népszabádsg* (Budapest), 6 August 1990, p. 5.

[25] Interview with Ferenc Mdl, Minister without Portfolio, *Népszabádsg* (Budapest), 7 November 1990, p. 8.

[26] United Nations Conference on Trade and Development (UNCTAD), *Commodity situation and outlook 1990* (TD/B/C.1/309, 31August1990).

Figure III.3. Non-fuel commodity price indexes, 1980-1990




*Source:* UNCTAD, *Monthly Commodity Price Bulletin.*

Although this was modest in comparison with the quadrupling of prices in 1973/74, and a doubling in 1979/80, it represented, at least temporarily, the largest improvement in the terms of trade of the oil exporting developing countries since 1981, and involved a considerable transfer of real income to them from the rest of the world. Oil prices fell in the first quarter of 1991; yet they have remained above prices in 1989 or the first half of 1990.

## The trading system in 1990

The past years have been characterized by growing impatience in some quarters with traditional multilateral approaches to resolving trade problems. Part of the difficulty stems from the fact that many of the rules embodied in GATT are no longer adequate to the task at hand. Moreover, GATT's enforcement mechanism is perceived as too ineffectual, too cumbersome and too slow when the rules are broken. These are some of the types of issues which the Uruguay Round is attempting to tackle.

### Aggressive unilateralism

Aggressive unilateralism - whereby one Government seeks to rule single-handedly on the fairness or unfairness of another country's trade policies - poses a danger to the multilateral trading system in which there are orderly procedures for dealing with possible trade infractions.

In addition to participating in the Uruguay Round negotiations (see below), the United States has been pursuing bilateral and regional initiatives with trading partners, as well as unilaterally using its 1988 Trade Act, as well as other measures, "to pry open markets and to enforce the rights of American industry and agriculture".[27]

Over the past year, the unilateral pursuit of open markets by the United States has been based on two main instruments: the "Super" and "Special" Section 301 provisions in the United States Omnibus Trade and Competitiveness Act of 1988 and the "Structural Impediments Initiative", originally launched in 1989 to produce fundamental changes in the workings of the Japanese and the United States economies in order to reduce the bilateral trade imbalance between them.[28]

Super 301, which had a two-year mandate, expiring in 1990, was first applied in 1989 against Brazil, Japan and India. Japan was cited for its refusal to buy United States commercial satellites and super-computers and for its barriers to American lumber; it agreed in the spring of 1990 to open its markets in these areas. Brazil dismantled its import-licensing programme and agreed to improve intellectual property protection. Only India refused to negotiate in the face of threatened United States sanctions and was therefore again named as an "unfair trader" in April 1990. However, the case against India has since been put to rest and is unlikely to be resuscitated given the fact that the bill's authority has now expired.

The second arm of Section 301 is the "Special" provision which was intended to strengthen the Government's ability to negotiate improvements in foreign intellectual property regimes. Unlike Super 301, Special 301 has no fixed expiration. No countries have actually been cited under this mechanism, thus avoiding the actual imposition of trade sanctions, though several were last year placed on a "Watch" or "Priority Watch List." In April 1991, inter-agency discussions took place in an attempt to make a decision as to which countries, if any, should be placed on this year's list.

On 26 April 1991, the United States Trade Representative charged China, India and Thailand with inadequate protection of intellectual property rights, giving them six months to resolve United States concerns or risk trade retaliation. In addition, the Administration placed Australia, Brazil and the European Community on its "Priority Watch List" citing serious problems as regards intellectual property protection or market access. The United States is particularly concerned about Australian and European quotas restricting the use of foreign television programming since, it is argued, movies and television are "premier exports" of the United States.

A third United States trade policy instrument is Title 7 of the 1988 Trade Act. This is a process similar to Special 301 which deals specifically with government procurement. Its time horizon is 1990-1996. No countries were named in 1990 under this vehicle, but this year, the United States Trade Representative indicated that the United States intended to bar Japan from bidding on federally supported construction projects. This was said to be in response to Japan's barriers against American construction companies bidding for Japanese public works. The threat of a ban will remain, according to the Trade Representative, until Japan makes significant improvements in its procurement practices.

The Structural Impediments Initiative talks, the first round of which concluded in June 1990, constitute another arm of United States trade policy. The Initiative, launched on 25 May 1989, is designed to address such barriers to United States exports to Japan as the Japanese distribution system, anti-competitive practices, and low consumer demand. At the insistence of the Japanese, the forum was also to confront some of the problems on the United States side that contribute to the bilateral trade deficit. Despite assertions that the approach is *not* "managed trade", the Initiative is clearly an attempt to achieve a different pattern of imports and exports than would be dictated under free trade.

The United States is undertaking a second set of Structural Impediments Initiative talks with Japan, in which the Japanese rice market and its lack of openness is sure to be on the agenda. So too are the *keiretsu* - the Japanese corporate "families" - which the United States claims obstruct market access. Under the June 1990 agreement, Japan assented to making the dealings of the *keiretsu* "more transparent". While the United States argues that virtually nothing has been done in this regard, the Japanese do not view the *keiretsu* as a problem in the first place and have indicated that they do not intend to delve into this subject again.

[27] United States Trade Representative Carla Hills, in the Hearings on the "Oversight of the 1988 Trade Act - 1990" before the Committee on Finance of the United States Senate, 7 February 1990.

[28] See *World Economic Survey 1990*, chapter III, for a more detailed discussion of the origins and previous application of these two instruments.

Also on the agenda is the question of United States access to the Japanese construction industry. One bone of contention stems from a 1988 agreement ensuring foreign access to 17 Japanese public works projects. The United States now wants this access extended to all such projects, while Japan maintains that the 1988 agreement was designed to provide foreign firms with experience in the Japanese market, not to guarantee them work.

Additional topics for negotiation include the easing of Japanese restrictions on foreign lawyers' activities in Japan, further clearing of the regulatory path for foreign financial firms wishing to operate in Japan, improving access for foreign mainframe and personal computers, and reducing duties on foreign paper products.

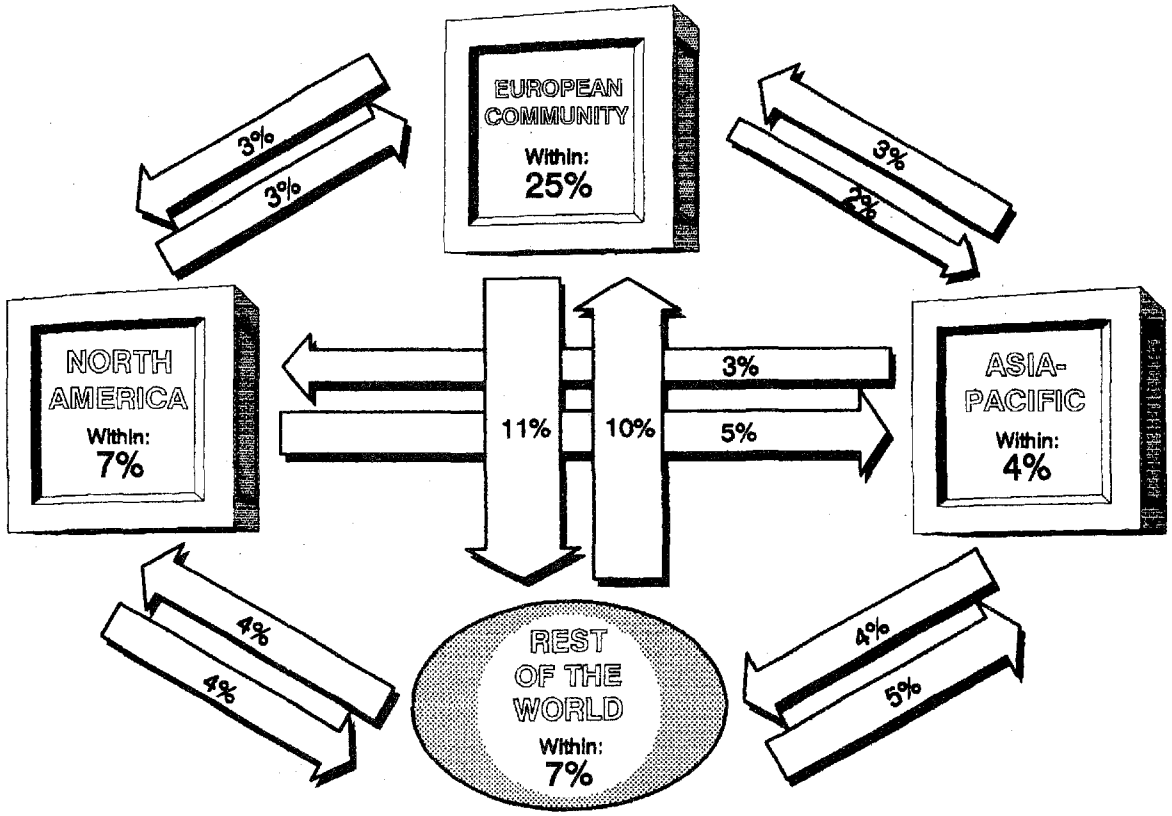
Unilateral measures to influence trade flows are also being taken by the Japanese. A high-level committee of Japanese and foreign business executives has been formed to explore ways to cut Tokyo's huge trade surplus.

All in all, an approach whereby foreign markets are aggressively pried open appears to work in the short run. It then becomes difficult to criticize this strategy and to argue the long-run benefits of an open, liberal trading system. But in the longer run there is little to be said for this approach. As noted by the United States Trade Representative, "...if we adopt the strategy of a results-oriented [trade policy], telling them what portion of the market we will have, we will have that spread throughout the global trading system...you are going to have contracted trade by definition. You will have, therefore, less prosperity and wealth by definition".[29]

## Trading blocs

For some years, concern has been voiced over the splintering of the global trading system into a number of large blocs. In 1990, a sizeable share of world trade took place within blocs and such intra-trade frequently represented a larger share of an area's exports than did interregional flows. The most noteworthy example of this trend is to be found in the trade pattern of the European Community (EC). Intra-trade between Canada, Mexico and the United States is greater than this area's exports to any other region and the intra-trade of the Asia-Pacific area is at least as large as its interregional flows (figure III.4.). Today the question is not whether these blocs will be formed, but rather how encompassing they will be and how to ensure that they will not harm the trading system.

Figure III.4. Shares of world exports within and between trading areas, 1990[a]




*Source:* UN/DIESA.

a North America bloc: Canada, Mexico, United States.
European Community bloc: Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, United Kingdom.
Asia-Pacific bloc: Hong Kong, Japan, Malaysia, Republic of Korea, Singapore, Thailand.

[29] Statement of the United States Trade Representative in the Hearings on the "Oversight of the 1988 Trade Act - 1990" before the Committee on Finance of the United States Senate, 7 February 1990.

Regional blocs are not in themselves inconsistent with GATT; article XXIV sanctions free trade areas and customs unions. Nor is it the case that international trade theorists uniformly condemn trading blocs as inimical to world trade. In fact, there are those who see regionalism as a logical first phase in the creation of a smoothly functioning multilateral trading system. Certainly, it is easier to reach agreement bilaterally or regionally than globally. Such "mini-lateralism" is seen by some as an efficient approach to global liberalization. On the other hand, preferential arrangements are often fed by interests that seek privileged access to markets and, in their turn, spawn such interests.

The plans for the single market of the EC and for a North American free trade zone have clearly altered the premises for regionalism. An Asian bloc revolving around Japan might emerge in the future. What is called for now is a firm resolve to keep those tendencies in conformity with both the letter and the spirit of GATT and to avoid tendencies to raise protectionist barriers in the course of this process. This calls for a revision and reinforcement of article XXIV.

### Enlarging the European economic space

Talks have been going on since 18 June 1990 on the establishment of a common economic space, designated the European Economic Area (EEA), between EC and the European Free Trade Association (EFTA). The framework for negotiation is based on article 238 of the Treaty of Rome and implementation of the so-called "four freedoms" (free movement of persons, goods, capital and services), as well as the requisite supplementary policies. Initially, the farming and fishing sectors were to be exempted from the discussions, and the original plan of action was to have the EEA agreement come into force on 1 January 1993.

However, negotiations broke down in late April 1991 over EC's demand for more fishing rights in EFTA waters as well as EFTA's insistence on having its own judges sit alongside the European Court of Justice in interpreting key aspects of Community law which would be applicable to the proposed EEA. Also, some EFTA members began voicing interest in simply joining the EC, rather than establishing an EEA.

Meanwhile, Czechoslovakia, Hungary and Poland have been pushing the EC to reduce trade barriers on steel, textiles and farm goods as part of their talks on association agreements with the Community - which, they hope, will pave the way for their membership. As these countries reorient their trade away from CMEA, they seek to expand it westward. If quotas on Polish steel or 50 per cent tariffs on Hungarian meats, for instance, were to be eliminated, their trade with EC could increase by some $500 million a year. However, according to EC's Commissioner of External Affairs, "These nations are strong in agriculture, textiles and steel, and all those subjects are very touchy in the community".[30] Hence, Brussels initially offered these three countries a ten-year transition to mutual free trade in two stages, with EC agreeing to make asymmetrically large tariff cuts in the first five years in everything except those three sectors - agriculture, steel and textiles - in which the three Eastern European countries most want EC market access.

While EC was initially resistant to any mention of eventual Eastern European membership, it is now also envisaged that three countries may reach an association accord with it, which would extend to them - by the end of the century - the freedom of movement of goods, services, labour and capital in the single market, as well as an option on full EC membership. Thus, membership in EC now figures in the preambles to agreement as "an ultimate, though not automatic" goal. The three countries would then be part of a second wave of new members, after a number of EFTA countries join in the mid-1990s. An obvious concern is that several European economies - Czechoslovakia, for instance - will effect a general increase in their average tariff rates. One response to this anxiety has been the insistence that any proposed agreements be in conformity with GATT rules in covering all areas of trade, agricultural trade included.

Partly as a consequence, EC members overruled Spain in promising the three Eastern European countries extra concessions on farm exports.Hence, Eastern Europeans will probably be able to sell more fruit, vegetables, pork and game, rather than more of the products still falling under the protection of the Common Agricultural Policy - such as beef, lamb, dairy products and cereal. Moreover, northern EC members overruled Mediterranean objections to yielding more on textiles and steel. All textile tariffs are now slated to disappear over the ten-year transition period, while steel import duties and quotas will go in five years.

### Trends in other blocs

On 1 January 1990, a free trade agreement (FTA) came into effect between Canada and the United States. Although specifically designed to promote, over a ten-year period, an already intense bilateral relationship (in 1989, intra-trade accounted for 34 per cent of the two countries' total exports), the FTA now looks like the first phase of an arrangement that could ultimately create a common market of some 360 million people.

Negotiations are expected to begin this summer between Canada, Mexico and the United States on the creation of a North American free trade zone. The talks, which are meant to be completed by the end of 1991, are likely to be highly contentious in all three countries.

Critical to the question of whether any sort of free trade agreement with Mexico can eventually be struck - or the Uruguay Round negotiations completed - is whether or not the United States Administration succeeds in extending the "fast-track" negotiating authority, a subject which is currently under debate in the United States Congress. Fast-track authority permits the Administration to negotiate trade agreements that Congress waives its rights to amend in order to avoid any unravelling of delicately balanced international compromises. Fast-track authority expired on 31 May 1991, by which point the Uruguay Round negotiations were to have been sealed, signed and delivered. Mexico has already indicated that it will not negotiate with the United States if the Bush Administration lacks fast-track authority.

[30] Frans Andriessen, quoted in *The New York Times*, 11 April 1991.

In an attempt to win votes for a two-year extension of the fast-track authority, the United States Administration, on 1 May 1991, announced a number of environmental and job-security commitments. Included are programmes, to be jointly operated with Mexico, to curb pollution on the border and strengthen environmental enforcement. Also on the agenda would be the naming of environmentalists - for the first time - to official trade advisory bodies, and government-funded efforts to assist workers dislocated as a result of increased foreign competition.[31]

A related, but yet more ambitious, proposal is the "Enterprise for the Americas Initiative", which calls for United States trade agreements with South American countries willing to cut their trade barriers with the objective of forming a single free trade area stretching from Alaska to Tierra del Fuego (see also chapter II).

**Southern America common market.** On 26 March, the presidents of Argentina, Brazil, Paraguay and Uruguay met to sign the Treaty of Asuncion, formally committing themselves to the formation of a tariff-free common market by the end of 1994. The Southern Cone Common Market or "Mercosul", as it is to be known, will involve not only the dismantling of barriers, but also coordination of policies on agriculture, industry, transport and even money and finance. Paraguay, which has low labour costs and large expanses of fertile land, is expected to develop its agriculture, especially cotton and soy. Farm products can be processed cheaply because of a virtually unlimited supply of inexpensive hydroelectric energy. Uruguay is expected to emerge as a financial and services centre for the Common Market. It has the region's top literacy rate and has been a traditional banking centre for Argentina and Brazil. For Argentina and Brazil, meanwhile, the Common Market is expected to provide more sales, particularly of manufactures, and foreign investment.

**Caribbean Economic Community.** The efforts of the Caribbean Economic Community (CARICOM) to create a customs union are being held back by the reservations of some member Governments over the impact of a proposed common external tariff. The new tariff was slated to be implemented by all 13 members at the start of 1991. Several countries, however, did not meet the deadline as their trade ministers cited concerns over the potential impact of such a common tariff on their national economies. None the less, the hope is to have this common tariff in place by the end of the year, a goal that was written into the treaty establishing CARICOM 18 years ago.

The aim is to have a common market in effect by 1993 and a monetary union the following year. However, if the common tariff runs into difficulties, it will set back attempts to implement economic integration. Such efforts have been hindered by nationalistic concerns and by the tendency of some Governments to implement significant changes in economic policy without consulting other members.

**East Asian Economic Grouping.** This proposal for a regional bloc was announced by Malaysia shortly before the breakdown of the Uruguay Round negotiations last December. It was originally presented as an alternative to the GATT talks on the premise that the failure of the Round would place greater emphasis on regional pacts. The grouping would include the six members of the Association of South-East Asian Nations (ASEAN) - Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand. Other potential members include Hong Kong, Myanmar, the Republic of Korea, Taiwan Province of China and Viet Nam. Notably absent, however, are Australia and New Zealand, though the latter expressed interest in joining the group in early March and both are members of the Asia-Pacific Economic Co-operation Conference (APEC).

Japan, which would be the grouping's linchpin, has been rather cool to the proposal. The strongest support for the scheme has come from Singapore, though only after assurances that the proposed grouping would be consistent with the GATT, would not erect trade barriers, and would supplement the work of APEC, which was formed in Canberra in November 1989. Given these conditions, it is not entirely clear how the grouping will undertake its stated objective, which is to turn South-East Asia into a leading exporting force and an investment haven and to serve as a counterpoint to EC and any bloc in the Americas.

### The Uruguay Round of multilateral trade negotiations

**Previous rounds.** Prior to the Uruguay Round there have been seven GATT liberalization rounds. In the opening round of 1948, 23 countries participated; 45,000 concessions were agreed upon, covering some $10 billion worth of trade. The last completed round - Tokyo, in 1979 - involved 99 participating countries and tariff reductions on $300 billion worth of trade. Under the seven completed rounds, the average tariff on manufactured goods in developed economies were reduced from roughly 47 per cent in 1947 to under 5 per cent in the 1980s. Thus, the role of GATT as a forum in which this essential contribution to world-wide growth was achieved is beyond dispute.

The Uruguay Round, which commenced in 1986 with 107 participating countries, is the most complex and ambitious round ever attempted. First, it covers old areas which were largely neglected in the past, such as agriculture, or were relegated to special regimes, such as clothing and textiles, which fell under the rubric of the Multifibre Arrangement (MFA). Second, the negotiations cover a variety of new sectors and issues, such as trade-related investments measures (TRIMs), trade in services and trade-related aspects of intellectual property rights (TRIPs). Last, but not least, it involves more participants, both developed and developing, a larger number of issues (15 negotiating groups) and more trade ($1 trillion worth of trade) than any previous negotiations.

**Issues in the Uruguay Round.** A Trade Negotiations Committee with two subsidiary bodies for goods and services, respectively, was established when the Round commenced in 1986.[32] The Group of Negotiations on Goods was, in turn, divided into 14 subgroups. Simultaneous mediation has been go-

[31] On 15 May, the House Ways and Means Committee and the Senate Finance Committee voted overwhelmingly to enforce negotiations for the free-trade agreement as well as a new round of lowering international trade barriers. Eventual agreement by both full Houses in the near future is thus likely, though not guaranteed.

[32] See *World Economic Survey 1990*, chapter III, pp. 70ff.

ing on, therefore, in 15 different areas altogether. Figure III.5 gives a diagrammatic interpretation of the scope of the Round. Clearly, not all the areas under discussion are of equal importance. Agricultural trade has become the most consequential single category being discussed, not only because liberalization in this area has the potential to expand global trade by over $100 billion a year, but also because major trading partners are paying particular attention to it.

Agriculture has traditionally been considered unique for socio-economic and strategic reasons and has, therefore, thus far remained largely outside of GATT's regulatory framework. However, the cost of agricultural protection has soared (see box III.1). Recent OECD calculations suggest that agricultural support policies cost the OECD countries' consumers and tax payers roughly $251 billion in 1989.[33] Globally, the figure would differ since consumers elsewhere presumably gain from lower prices, while farmers elsewhere lose. However, the true significance of such transfers is the distorting impact they have on global food production.

Agricultural trade and attempts to liberalize it have, however, turned out to be the Uruguay Round's stumbling block. The European Community proposed reducing farm subsidies by 30 per cent over 10 years, but were unwilling to make specific proposals for cutting import barriers or export subsidies. Argentina, Australia, Canada, the United States and other farm-exporting nations proposed slashing farm subsidies by 75 per cent over 10 years and export subsidies by 90 per cent. A Swedish compromise plan to cut assistance to farmers by 30 per cent over 5 years in all three areas under discussion - domestic supports, barriers to imports and export subsidies - failed to break this impasse and the talks were suspended on 8 December.

Since 1974, textiles and clothing have been regulated under MFA, which is a framework of voluntary export restraints (VER) governing textile and clothing exports of most developing countries into nearly all major industrial country markets.[34] The main instruments of the MFA are bilaterally negotiated quotas in narrowly defined product categories. The 1974 MFA has been extended three times and currently covers products made of man-made and vegetable fibres, wool, silk and cotton. More than half of all textile fibres, textiles and clothing imported by developed from developing countries are subject to MFA quotas, making the scheme an extremely comprehensive example of "managed" trade. The current MFA is due to expire 31 July 1991. According to some estimates, free trade in textiles and clothing would increase developed country imports by $50 billion a year, though not the entire benefit of this increase would accrue to the developing country exporters.[35]

Two basic approaches to phasing-out MFA have been put forward. The first is a MFA-based phase-out proposed by the developing countries themselves, EC, Japan and the Nordic countries. The second scheme, suggested by Canada and the United States, calls for a new transitional structure, relying on global quotas, combined with a 10-year phase-out.

The developing countries clearly have a great deal to gain from a meaningful reform of MFA. Conversely, the so-called "new issues" - services, intellectual property and foreign investment - which have heretofore fallen outside the scope of the GATT, are of particular interest to a number of developed countries. Services now account for roughly 20 per cent of world exports and industries such as banking, insurance, tourism, transport and telecommunications account for over half the national income of many industrialized economies. Last year, the value of international trade in services climbed to close to $800-billion and grew roughly by 12 per cent.[36] Moreover, a number of developing economies (Hong Kong, the Republic of Korea, Singapore, Mexico) have been making inroads as suppliers of services.

None the less, developing countries were generally opposed to the inclusion of services on the Uruguay Round's agenda - on the one hand, for fear of local competition from more efficient developed economy firms and, on the other, because they were not optimistic about gaining greater access for their own firms in industrial country markets. Despite such qualms, services were included in the Round, and a compromise was reached at the December1988 mid-term review, but lately negotiations have been blocked over the issue of special exemptions for certain sectors.

The group on trade-related investment measures (TRIMs) has been examining policies that interfere with companies wishing to invest abroad and hence restrict trade. Most limiting in this regard are rules about local content (which specify that a company's foreign plant must buy some minimum proportion of its material locally), export performance (a given share of output must be for export) and foreign exchange (for example, if imported inputs are needed, they must be paid for with earnings from exports). Progress in this area has been difficult and complicated by the fact that, from the perspective of developed country investors, incentives to invest abroad often surmount concerns over local rules and restrictions.

Many developed country producers complain that their patents, trademarks and other intellectual-property rights are infringed in foreign markets, particularly in developing countries. The prices of products such as drugs and software with large intellectual property elements are so high in relation to incomes in poor countries that a great deal of product piracy is inevitable and often beyond the control of developing country Governments.

A divide separates technology-exporters and technology-importers. The latter group remains unpersuaded by arguments that

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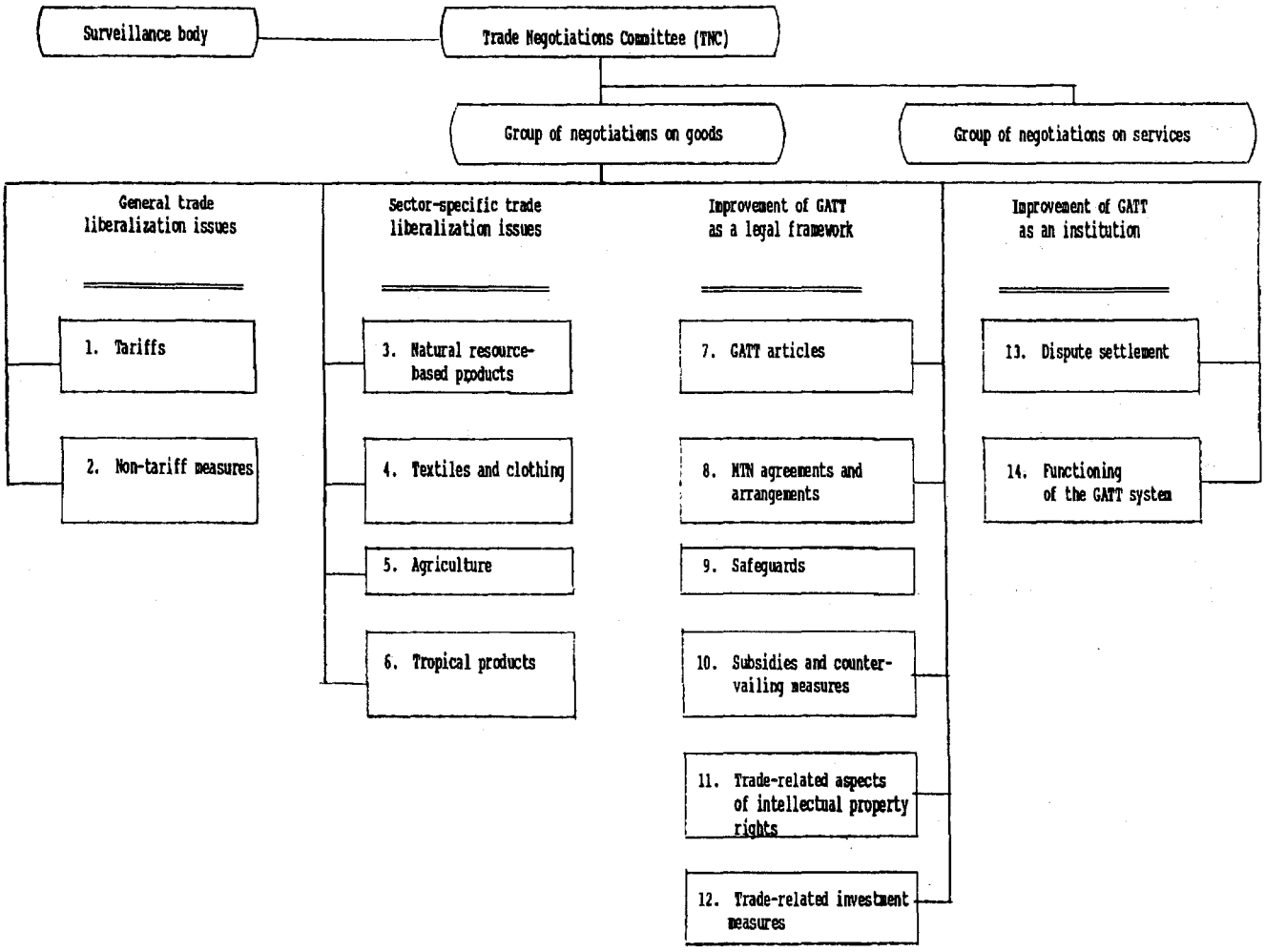
[33] Organization for Economic Co-operation and Development, *Agricultural Policies, Markets and Trade: Monitoring and Outlook, 1990* (Paris, 1990), table IV.8. Total transfers are defined as the sum of all transfers from taxpayers plus all transfers from consumers minus budget receipts from tariffs.

[34] Though initially signed in 1974, the MFA's roots go back to 1937 when the United States, under the guise of a "gentlemen's agreement", imposed restrictions on Japanese textile imports. In the 1960s similar, but more encompassing, arrangements for cotton textiles were concluded, which were extended to include major developing country suppliers. See Refik Erzan and Paula Holmes, "Phasing out the Multi-Fibre Arrangement", *The World Economy*, vol.13, No.2 (June 1990), pp.191-211.

[35] William R. Cline, *The Future of World Trade in Textiles and Apparel*, revised edition (Washington, D.C., Institute for International Economics, April 1990).

[36] Report of the Director-General of GATT to the GATT Council, 23 April 1991.

Figure III.5. The Uruguay Round of multilateral trade negotiations: organizational chart




*Source:* GATT secretariat.

### Box III.1. Grain subsidization

World grain markets are locked into a skirmish over subsidization, as major exporters battle over shares in a contracting world market. Faced with surging production and falling prices, both the United States and the European Community are engaged in a no-win competition. Both are paying higher and higher subsidies which either side can ill afford. In 1989, agricultural expenditure accounted for 2.6 per cent of total current central Government expenditure in the United States. For France and Germany, the corresponding figures were 3 and 1 per cent, respectively.[a] These numbers may seem reasonably low until they are put into some perspective. In the same year, expenditure on education accounted for under 2 per cent of central Government expenditure in the United States. For Germany, the comparable figure is 1 per cent.

The European Community, once a net grain importer has by its Common Agricultural Policy (CAP) become the world's second largest exporter, after the United States. Originally designed to give farmers fair prices, CAP had already, by the mid-1970s, led European farmers to grow more wheat than the continent consumed. Export restitutions, designed to bridge the gap between the internal Community price and the price the wheat could fetch on world markets, were instituted. The United States - alarmed by the surge in Community grain exports - initiated its own Export Enhancement Programme (EEP) designed to win back sales to selected markets through export subsidies.

The consequence of these two programmes has been to lower the world traded price of wheat - at one point to $70 per ton, or less. In 1990, wheat prices ranged from $106 to $137. Meanwhile, in September of last year, EC restitution levels were $135 a ton for soft wheat and over $200 a ton for hard wheat. Other producers - including Argentina, Australia and Canada - are also under pressure. Canada, for instance, had a record harvest in 1990 and was therfore slated to make deficiency payments of up to $850 million.[b] These high levels of support are one explanation of the difficulties being encountered in liberalizing agricultural trade.

a See Organisation for Economic Co-operation and Development, *Agricultural Policies, Markets and Trade: Monitoring and Outlook* (Paris, 1990), pp. 112 and 257 (figure).

b See *Financial Times*, 7 December 1990, p. 2: article by David Blackwell.

greater and more harmonized property protection would foster innovation and generate positive net benefits. Instead, many developing countries view the strengthening of intellectual property rights as an unjustified claim for monopoly rents; in any case, they question the jurisdiction of GATT in these matters, since the World Intellectual Property Organization (WIPO) is specifically geared to this purpose. The negotiating group on trade-related intellectual property rights (TRIPs) still has before it the task of agreeing whether there should be a single comprehensive agreement in this area, under the rubric of GATT and subject to GATT's normal dispute settlement procedures, or whether there should be a number of smaller agreements with tough rules on piracy and counterfeit goods, but giving countries greater discretion as regards patents.

## Chapter IV

# INTERNATIONAL FINANCE AND NET RESOURCE TRANSFERS

International financial relationships in much of the 1990s are likely to be affected at the global level by two recent sets of events, both of them in Europe and both the focus of this chapter, along with developments in the financing and international resource transfers of developing countries.

One set of events is the economic revolution under way in Eastern Europe and the Soviet Union. As this region reintegrates itself into the international market economy, it will seek to draw heavily on international financial resources, both public and private. The scale of possible resource needs has raised fears of a scarcity of funds for traditional aid-recipient countries, Governments that borrow from commercial sources and investment in general. Indeed, the *Survey* devotes a chapter to assessing this question (see chap.VI). Thus far, at least, flows to the region have not caused a shortfall or caused interest rates to rise. Private-sector investors have hesitated to place substantial new funds in the region and for the time being new financing there has to be largely official or guaranteed by creditor Governments.

The region is also involved in considerable restructuring of its foreign debt. In the case of debt owed to official creditors, the expressly political nature of the debtor-creditor relationship has come to the fore. In particular, debt forgiveness well beyond the scale ever contemplated for those developing countries in which most people live not much above subsistence was recently arranged for Poland.

The major development in Western Europe was the commitment made in 1990 by the European Community to establish a unified monetary system with a single currency by the end of the decade. The monetary union is likely to cement the Common Market of independent States into a single and potentially very dynamic economic space. Developments there are important, not only because of the economic size of the European Community itself, but also for the lessons its experience may hold for other economic and political groupings and federations.

These events take place against the backdrop of an ever-evolving international economic and financial environment, one in which financial markets are becoming more global and trading in instruments ranging from currency futures to equity shares can take place almost around the clock and virtually instantly. It is a world in which the Governments of some developing countries, like most large financial institutions and corporations before them, are beginning to actively manage their portfolios of reserve assets and debts by using sophisticated financial instruments to swap transaction currencies, interest schedules and other financial characteristics to increase control over their risk, income and payment flows. It is also a world in which international capital on any continent may move quickly into or out of currencies and can cause large movements in key exchange rates. In this world, international agreements to coordinate exchange rate policies can require large-scale central bank intervention in foreign exchange markets to stem undesired exchange rate changes or— if economic conditions are right— central bank intervention can be effective with very little actual expenditure at all (see box IV.1).

## Net transfer of resources among countries

One concern regarding the international consequences of policies undertaken in various parts of the world is their effect on the transfer of financial resources among countries. Attention may be directed to the prospective transfer among States in a European Monetary Union or the implications of financial commitments to Eastern Europe and the Soviet Union or the transfers out of the heavily indebted developing countries. In all cases the heart of the concern is that total investment in a country is limited by its domestic saving plus the resources that are transferred from abroad or minus the resources that it transfers overseas.[1]

### Net transfer of resources from developing countries

Perhaps the most striking observation about net transfers is that, since the early 1980s, most groups of developing countries have been net providers of financial resources to the rest of the world, rather than recipients. In 1990, the developing world as a whole transferred $39 billion abroad (see table IV.1).

About $7 billion of this was accounted for by the mainly Middle Eastern petroleum-exporting countries that were capital exporters for most of the 1970s and the early 1980s. Although Iraq and Kuwait disappeared from the oil market in

[1] Many differences exist in the definition and measurement of the net resource transfer. The discussion here is in terms of what in earlier *World Economic Surveys* was called the "net transfer on an expenditure basis" and includes the net effect of all financial flows in and out of a country, including central bank purchase or sale of foreign exchange reserves and all interest and profit flows (the measure is derived from national income accounting concepts in *World Economic Survey, 1986* (United Nations publication, Sales No. E.86.II.C.1), pp. 163-164). Measurement of the net transfer using the different concepts employed in various international organizations and different sources of data were compared in *World Economic Survey, 1990* (United Nations publication, Sales No. E.90.II.C.1 and corrigenda), pp. 79-81 (see also the comparison in OECD, *Financing and External Debt of Developing Countries, 1989 Survey* (Paris, 1990), pp. 75-77).

### Box IV.1. Central bank actions in foreign exchange markets

From the Rambouillet economic summit of seven major industrial countries (the Group of Seven) in 1975 to the New York meeting of finance ministers and central bank governors of the Group in January 1991, the Governments of key currency countries have jointly sought to oversee their foreign exchange markets. One part of this can be — but usually is not — an active coordination of monetary policy and interest rates. It also involves periodic intervention in foreign exchange markets by buying and selling currencies. The effects on exchange rates are uneven. However, within the Exchange Rate Mechanism (ERM) of the European Community, the experience is quite different.

Members of ERM agree to maintain their mutual exchange rates within fixed bands of jointly agreed parities; the total structure of rates then floats against other major currencies.[a] In the first half of 1990, the Deutsche mark exchange rate rose against the dollar, but not as much as many other currencies in ERM.[b] As the latter currencies rose towards their limits, their central banks had to sell domestic currency for foreign to contain the rise, thereby accumulating reserves, while they also loosened monetary stances to stem capital inflows. Thus, between February — when the German Government announced that talks would begin on monetary unification of the country — and June, short-term interest rates rose in Germany and fell in France, Italy, the Netherlands and Spain. Reserves rose in the latter four, with France accumulating the equivalent of $4 billion in the period and Italy over $17 billion.[c]

In the ERM, when central banks enter the foreign currency market, they are signaling the constancy of policy and a determination to maintain the ERM agreements. The commitment is to soak up whatever is the current excess demand or supply of their currency to prevent the exchange rate from exceeding the allowed band. Monetary policy changes, then, are supposed to remove the causes of the imbalances. In contrast, when Germany, Japan or the United States enters the market for Deutsche marks, yen or dollars, no such commitment is stated or implied. It is only a signal to the market that the central banks are not pleased with the recent trend in exchange rates. Information is thus given and uncertainty about future policy is increased, the object being to make the market reassess its assumptions about the future course of interest rates and exchange rates.

In some cases, market sentiment about the prospects for exchange rate changes can be reversed merely through official announcements or rumours that intervention might occur. This was the case, for example, in April 1990 when the yen was especially weak. Finance ministers and central bank governors of the Group of Seven were scheduled to meet on 7 April and rumours circulated that a "massive yen support package" might be arranged at that time, at which point market traders became more

[a] For background on the operation of ERM and proposals to transform it into a European Monetary Union, see box IV.2.

[b] In order to contain re-emerging inflation in 1989, monetary policy had tightened in much of Europe, including Germany; but Germany also had a surge in demand and imports in early 1990 associated with the coming unification of the country (see chap. II for more details).

[c] Data are flows of reserve assets on a balance-of-payments basis, as per IMF, *International Financial Statistics*, for France, and Banca d'Italia, *Economic Bulletin*, for Italy. (Comparable developments also occurred in countries outside ERM that informally shadow ERM exchange rates, such as Finland and Sweden.)

Table IV.1. Net transfer of financial resources of groups of developing countries, 1980-1990[a]
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Long-term capital importers, of which: | 33.1 | 49.1 | 31.5 | -5.6 | -33.4 | -24.5 | -16.0 | -47.8 | -40.1 | -39.8 | -32 |
| Deficit energy exporters | -16.6 | 9.3 | 10.0 | -12.1 | -24.1 | -22.0 | 0.3 | -18.7 | -6.5 | -17.3 | -23 |
| Energy-importing countries | 47.4 | 42.0 | 27.0 | 9.7 | -8.5 | -14.8 | -23.5 | -28.6 | -37.3 | -27.2 | -3 |
| Recent surplus economies[c] | 6.3 | 3.4 | -0.7 | -4.3 | -8.9 | -11.9 | -23.9 | -31.0 | -26.5 | -20.6 | -11 |
| Other energy importers | 41.1 | 38.6 | 27.7 | 14.0 | 0.4 | -3.0 | 0.4 | 2.4 | -10.8 | -6.6 | 8 |
| China | 2.3 | -2.2 | -5.5 | -3.3 | -0.8 | 12.3 | 7.1 | -0.5 | 3.6 | 4.7 | -5 |
| Surplus energy exporters | -92.9 | -46.2 | 0.5 | 22.1 | 14.0 | 9.2 | 27.2 | 13.7 | 15.7 | 6.1 | -7 |
| All developing countries | -59.8 | 2.9 | 32.0 | 16.5 | -19.4 | -15.3 | 11.2 | -34.1 | -24.4 | -33.7 | -39 |
| Memorandum items | | | | | | | | | | | |
| 15 heavily indebted countries[d] | 8.7 | 20.4 | 9.4 | -23.8 | -40.6 | -40.6 | -22.1 | -28.4 | -31.0 | -36.2 | -30 |
| Sub-Saharan Africa[e] | 7.9 | 9.2 | 7.4 | 5.5 | 2.3 | -3.2 | 5.4 | 6.2 | 7.5 | 6.1 | 9 |

*Source*: UN/DIESA, based on data of IMF, official national and other sources (for memorandum items, see statistical annex, table A.27).

[a] Expenditure basis (negative of balance on payments of goods, services and private transfers, excluding investment income).

[b] Preliminary estimate.

[c] Hong Kong, Republic of Korea, Singapore and Taiwan Province of China.

[d] Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, Venezuela and Yugoslavia.

[e] Excluding Nigeria.

cautious and pressure against the yen eased somewhat. Following the meeting, the markets became more nervous as the meeting's communiqué could be interpreted in different ways. The exchange rate moved erratically, but the anti-yen psychology in the market had been tempered. Soon the yen began a recovery that lasted for much of the year and had nothing to do with the small-scale, albeit coordinated intervention that actually took place.[d]

By the same token, more considerable intervention by Japan and the United States in the first quarter of 1990 had little appreciable effect on their exchange rates.[e] Up to April 1990, the yen had been depreciating against the dollar (and the Deutsche mark) mainly because of a drop in Japanese investor confidence associated with the Tokyo stock market crash, political developments and uncertainty about inflation trends.

Thus, if central bank intervention affects exchange markets by sending a signal from policy makers, it is a signal possibly outweighed by other considerations. One reason is that intervention necessarily runs counter to the existing sentiment of the market (else the intervention would not be necessary). Thus, when the depreciation of the dollar against the yen accelerated in the third quarter of 1990, traders had realized that the United States was indeed sinking into a recession and that United States monetary policy might ease and interest rates fall. At the same time, Japan's tight monetary policies of the previous 12 months had failed to dampen rising inflation, which made a lowering of interest rates there unlikely. These expectations about the movement of relative interest rates were unlikely to be changed because, say, the Bank of Japan decided to buy dollars.

It is not surprising, therefore, that intervention has a greater impact when two or more central banks act in concert, not because the combined trading represents a larger intervention, but because the concerted action enhances the credibility of the signal.[f] But, even in the presence of concerted intervention, the business of convincing market participants that an act of intervention is a credible signal remains precarious. Concerted intervention by Canada, France, the United Kingdom and the United States failed to prevent the decline of the dollar in early February 1991, partly because an official of Deutsche Bundesbank made comments that were interpreted by the market to mean that his bank was a reluctant participant in the intervention exercise and also partly because the central banks of Germany and the United States had simultaneously widened the interest rate differential favouring Germany.

Intervention might become a more consistently credible tool if central banks were more often willing to back up intervention with macroeconomic policy changes. But this would mean more frequently subordinating domestic economic priorities to exchange rate policy.[g] For large economies outside the context of the European Monetary System — without all the political and economic commitments that it entails — this would be unusual.

[d] "Treasury and Federal Reserve foreign exchange operations, February-April 1990", *Federal Reserve Bank of New York Quarterly Review* (spring 1990), p. 71.

[e] United States intervention totalled $2.4 billion, mainly in purchases of yen, but also of Deutsche marks; Japanese intervention against all currencies, as measured by the sales of foreign exchange reserves, totalled $11.4 billion (data of Federal Reserve Bank of New York and the Bank of Japan).

[f] See Kathryn Dominguez, "Market response to coordinated central bank intervention", *National Bureau of Economic Research Working Paper*, No. 3192 (December 1989).

[g] There have been only three occasions — 1979, 1985 and 1987 — when the exchange value of the dollar became a factor in United States monetary policy decisions (see B. Dianne Pauls, "U.S. exchange rate policy: Bretton Woods to present", *Federal Reserve Bulletin*, November 1990, pp. 891-908).

August 1990, the grouping as a whole benefited from the rise in oil prices and accumulated financial surpluses that were invested abroad (or in some cases contributed to the military effort of the coalition forces in the Persian Gulf area).[2] In other words, as a result of the year's economic activity and the terms-of-trade gain from higher oil prices, gross domestic saving (including that of Government and the private sector) exceeded what was invested in the economies of the group and the rest was contributed as foreign grants or used to purchase foreign assets. In 1991 and ensuing years, this relationship may be tempered as vast investments are undertaken for reconstruction after the Gulf war and as Iraq makes payments of compensation to residents of countries outside this grouping in accordance with the international arrangement to end the war in the Gulf (see Security Council resolution 687 (1991), part E).

This notwithstanding, most of the developing world's net foreign transfer in 1990 originated in other countries. Those denoted in table IV.1 as the "long-term capital importers" transferred about $32 billion overseas in 1990, compared to $40 billion in 1989. However, a significant portion of the funds transferred in 1990 were used to build up official reserve holdings, so that while sacrificing funds for imports and investments, the purchases increased the security of the countries adding the reserves. For a sample of 93 capital-importing developing countries on which somewhat more detailed information is available, reserves thereby rose to three months' expenditure on imports of goods and services (including interest payments).[3]

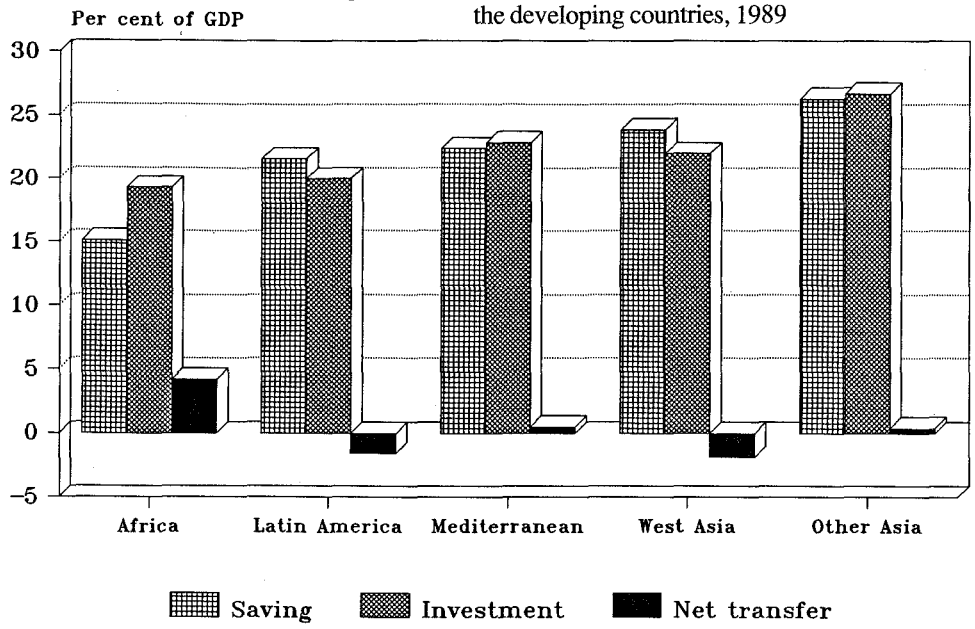
In years past, a large source of the net outward transfer was the group of four rapidly growing exporters of manufacturers in Asia, the "Four Tigers".[4] These economies made net transfers from a position of economic strength. They are now in a period of consolidation, however, and their outward transfer in 1990 was only about 40 per cent of what it was at its peak in 1988. On the other hand, China switched from being a net absorber of foreign resources in 1989 to a net supplier in 1990, as it boosted its exports and curtailed imports, building up its foreign assets in the process.

[2] *Additional detail on the balance of payments of this group of countries and others to be discussed below is presented in the statistical annex.*

[3] Progress was not uniform; in particular, sub-Saharan Africa (excluding Nigeria) saw its reserves and reserve cover fall (see table A.28).

[4] Hong Kong, Republic of Korea, Singapore and Taiwan Province of China.

Figure IV.1. Saving and its uses in the developing countries, 1989




*Source:* Statistical annex table A.12.

One grouping of countries in table IV.1 experienced a strong improvement in its net transfer, namely, the energy-importing countries, excluding the "Four Tigers". This group of countries saw a significantly positive net transfer for the first time since 1983, but the improved net financial transfer did not translate into an improvement in real terms, i.e., it was not accompanied by a surge in investment or imports, but rather served to finance the higher import bill mainly arising from the rise in oil prices. Indeed, the volume of their imports barely grew.

Among the countries with clearly defined financial and economic weaknesses, one region has experienced a consistent net transfer of foreign resources, namely, sub-Saharan Africa.[5] While the transfer is small in dollar terms, the economies of the region are themselves relatively small and the transfer has been significant for some individual economies. The countries are, however, generally oil importers and primary commodity exporters. In 1990 they suffered a terms-of-trade decline of about 6 per cent, which more than offset the estimated $3 billion improvement in their net transfer and thus the volume of their imports fell 2 per cent.

The other economically weak economies comprise the mainly middle-income countries in foreign debt crisis, and they continued to make large transfers abroad in 1990. A familiar sample of 15 of these countries transferred about $30 billion.[6] The transfer was somewhat smaller than the year before owing to partially offsetting inflows of official credits (some related to enhancements in debt reduction agreements[7] and a smaller outflow to private banks (see table A.27 for details). The latter was the result of some reduction in the debt outstanding in preceding years and growing arrears on interest payments.

The difficulties of the weaker developing countries may be better appreciated by comparing regions of the developing world in terms of their average gross saving, gross investment and net transfer patterns. Thus, in 1989, the last year for which sufficient data were available, the developing countries of Asia (excluding West Asia) had the highest — indeed, quite strong — investment rate of over 26 per cent of GDP (see figure IV.1). Also, it was virtually completely self-financed, which is more likely to happen when economies grow rapidly, people have incentive to save large portions of their income increments and Governments find their tax revenues growing apace with the rise in incomes.[8]

The situations in Africa and Latin America provide a sobering contrast. The 1989 gross investment rate in Africa was 19 per cent, and this despite a positive net transfer of about 4 per cent of the region's GDP. This is because the gross savings rate was only 15 per cent of GDP, itself a reflection of numerous instances of political and economic instability and the strong dependence of Africa's income and thus saving on international commodity prices. By way of contrast, in 1980 the average savings rate in Africa was 22.5 per cent of GDP.

Latin America's investment rate in 1989 was almost the same as Africa's, despite the far greater level of income and wealth in Latin America. But Latin America's savings rate was higher than its investment, the difference having been transferred abroad to the region's creditors mainly in the form of interest payments. Latin America's situation is, however, better in this regard than it was a few years before; e.g., in 1985, the negative transfer was almost 5 per cent of GDP (see table A.12).

[5] Defined here to exclude Nigeria (for details on the financial composition of the transfer, see table A.27).

[6] These are the countries that were the initial target of the strategy proposed by the United States in 1985 for resolving the developing country debt problem, namely, Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, Venezuela and Yugoslavia.

[7] The role of "enhancements" is discussed in the context of the Brady Plan in chap. VII.

[8] Not all countries shared in this result, but it does roughly sum up the experience of the region.

Partly in recognition of the low investment rates and the underlying economic difficulties that they reflect, the international community became more flexible in its strategy for helping countries emerge from their debt crises. It will be argued in chapter VII, however, that additional flexibility will be needed if countries making strenuous efforts to reform their economies and adjust their productive structures are to succeed and finally leave their debt crises behind them.

But the problem of mobilizing adequate resources for investment must simultaneously be tackled from the side of increasing saving in many of the developing, and indeed developed, countries as well. Overall, saving in both groups of countries has declined since the mid-1970s.[9] In the 1990s, when globally rising demands for investment are being made, countries that are able to increase their ability to generate their own resources will be at an advantage. A prerequisite to generating large increments to saving is for incomes and output to grow significantly and on a sustained basis. This requires, in turn, successful economic adjustment and, wherever it exists, elimination of the debt overhang.

**Large-scale net financial transfer to the United States**

If the developing countries as a group are transferring financial resources abroad, it is the industrial countries as a group that are receiving them. The economies of Eastern Europe and the Soviet Union taken together, including the former German Democratic Republic, neither made nor received transfers on a net basis in hard currency in 1990, although they had been net providers of such resources to the rest of the world in previous years.[10] The net absorption of resources was by the developed market economies and especially by the United States (see figure IV.2).[11]

The largest national providers of financial resources to the United States were Japan and, most likely, Germany, as in previous years (see table IV.2). Western Europe as a whole, however, is no longer transferring financial resources to the United States, and the transfer from Germany *per se* is diminishing, both because Germany's overall transfer is falling (see table A.26) and because more of it is being used within Europe.

Table IV.2. Net resource transfers to the United States, by region, 1980-1990
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Canada | -0.5 | 0.3 | 7.1 | 9.0 | 12.3 | 13.1 | 10.2 | 8.0 | 7.1 | 5.1 | 4.0 |
| Japan | 9.5 | 14.5 | 15.5 | 24.6 | 42.1 | 51.3 | 52.1 | 53.4 | 47.3 | 41.5 | 32.6 |
| Western Europe | -16.7 | -9.0 | -2.7 | 5.4 | 21.4 | 31.1 | 34.8 | 32.2 | 18.7 | 1.7 | -1.8 |
| of which: | | | | | | | | | | | |
| Germany | 2.4 | 2.9 | 5.3 | 8.3 | 13.2 | 15.9 | 20.0 | 21.4 | 18.1 | 13.8 | .. |
| United Kingdom | -2.2 | 1.1 | 2.9 | 2.8 | 3.0 | 5.3 | 5.6 | 4.7 | -- | -4.1 | -3.9 |
| Latin America and the Caribbean | -2.2 | -6.3 | 4.7 | 18.0 | 20.6 | 16.6 | 12.7 | 15.3 | 10.2 | 10.7 | 10.7 |
| of which: | | | | | | | | | | | |
| Mexico | -2.7 | -5.5 | 4.2 | 10.1 | 7.9 | 7.5 | 7.3 | 8.3 | 5.6 | 5.2 | .. |
| Major oil exporters of Africa and Asia[b] | 36.7 | 24.9 | 5.8 | 0.8 | 5.2 | 3.1 | 2.3 | 7.2 | 5.7 | 11.3 | 14.8 |
| Other developing countries | -4.7 | -0.6 | 1.1 | 9.4 | 21.3 | 22.1 | 31.6 | 42.1 | 34.7 | 35.6 | 35.6 |
| Eastern Europe and USSR | -2.7 | -2.9 | -2.8 | -1.7 | -2.1 | -1.4 | -- | -0.2 | -1.6 | -3.5 | -2.2 |
| Other countries[c] | -0.1 | -4.7 | -4.4 | -8.0 | -11.0 | -12.9 | -3.4 | -4.9 | -6.6 | -7.8 | -8.0 |
| Total[d] | 19.4 | 16.1 | 24.3 | 57.6 | 109.8 | 123.0 | 140.4 | 153.1 | 115.5 | 94.4 | 85.8 |

*Source*: UN/DIESA, based on data of United States Department of Commerce, *Survey of Current Business*.

[a] Preliminary estimate; full country breakdown unavailable at this time.

[b] Comprising OPEC member countries, excluding Ecuador and Venezuela.

[c] Including net transactions with international organizations and unallocated amounts.

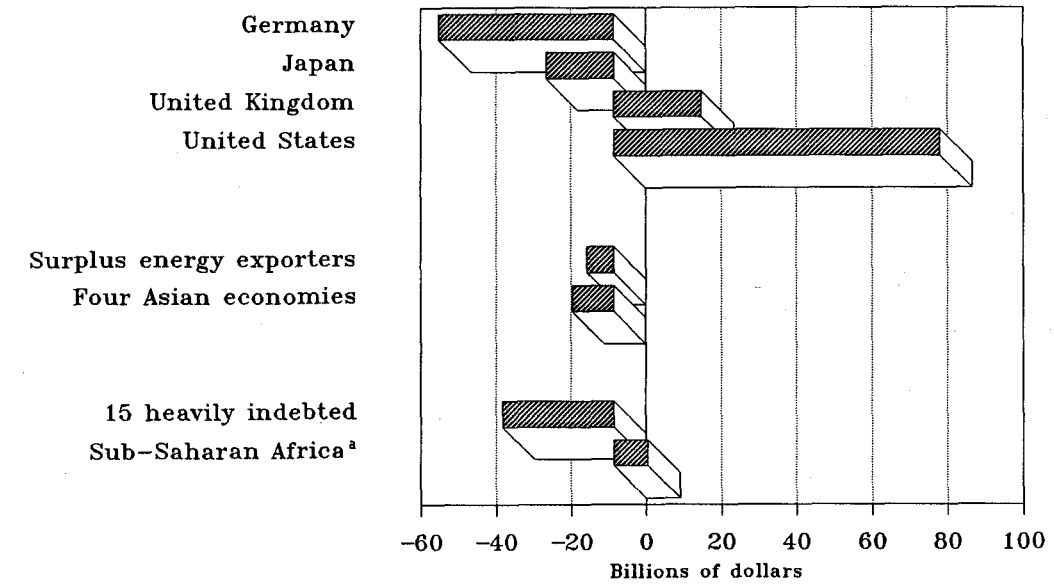
[d] Differs slightly from total in table A.28 because certain private transfers are unavailable on a geographical basis.

[9] See Bijan Aghevli and others, *The Role of National Saving in the World Economy: Recent Trends and Prospects*, Occasional Paper No. 67 (Washington, D.C., IMF, March 1990).

[10] This had been mainly on the strength of net foreign asset accumulation by the Soviet Union and debt-servicing payments, especially by Poland and Romania (the financial situation of this region is discussed later in this chapter).

[11] The $23 billion net transfer to the United Kingdom shown in figure IV.2 was the third successive year of transfers on that scale (see table A.26) and was the balance-of-payments counterpart to the credit-fed surge in demand discussed in chap. II. The transfer has taken the form, in particular, of short-term capital inflows, although last year's transfer was also abetted by the virtual absence of new direct investment outflows by British firms, compared to about £12.5 billion in each of the previous two years (data of United Kingdom Central Statistical Office, release CSO(91)36, 13 March 1991).

Figure IV.2. Net international transfer of financial resources in 1990




*Source:* UN/DIESA, based on data of IMF and national sources (expenditure basis).

* Excluding Nigeria.

The developing countries continue to supply the United States with large resource transfers, totalling over $60 billion in 1990, mainly from countries that are accumulating reserves and other foreign assets in dollar investments that are paid for out of dollar trade surpluses. As Latin America's net transfer to the United States highlights, however, some of the transfer also arises from the servicing of United States financial claims on developing countries, most especially as regards debt owed to banks domiciled in the United States.

Net transfers to the United States were made in 1990 primarily in the form of short-term financial flows, most of which, however, cannot be identified and are classified as errors and omissions in United States balance-of-payments data (see table A.26).[12] Among traditional forms of financing, foreign direct investment in the United States plummeted from $72 billion in 1989 to $26 billion in 1990, the lowest level since 1985, while United States direct investment abroad — $36 billion — was only slightly more than in 1989. Foreign lending to United States banks also dropped sharply in 1990 and the inflow of funds to the United States for stock purchases — over $8 billion from March to September 1989 — became instead a large and steady outflow that came to $16.5 billion from the fourth quarter of 1989 to the end of 1990. This was one side-effect of the large-scale drop in stock prices that took place on all the major stock exchanges of the world and that seems to have brought about a degree of repatriation of overseas equity investments in several countries.

With the United States net transfer now so heavily dependent on short-term and unidentified flows, the ability of the United States to continue attracting capital from abroad — and thus absorb resources in amounts comparable to recent years — might appear less certain, especially in the light of the new mix of monetary policies in the major industrial countries. That is, one factor that helped the United States attract foreign financial resources in large quantities over most of the 1980s was its relatively high interest rates. However, with the rise in interest rates in Europe and Japan since 1989, the interest differential in favour of the dollar has been shrinking. By the autumn of 1990 it had disappeared *vis-à-vis* both the yen and the Deutsche mark, whereas 18 months earlier there had been a 5 percentage point differential over the yen and about a 3 percentage point advantage over the mark for both long-term and short-term interest rates (see table A.8). Inflation rates have long been higher in the United States (and thus the interest differential was a compensation) and as they remained so in 1990 (see table A.7), the incentive for investors to place funds in the United States was considerably reduced. The weakening of the United States economy and the onset of recession in late 1990 added more reasons not to bring funds to the United States at this time.

With this set of events, a shrinkage in the net transfer and a decline in the exchange rate would be expected and both occurred in 1990.[13] Including its fall in 1990, the dollar was more than 40 per cent down from its peak in 1985 and almost 20 per cent below its level in 1980 in real effective terms (see

[12] The statistical discrepancy in the United States balance of payments is thought to arise mainly from partial recording of capital flows and the income on such flows, although there may also be a significant underreporting of United States merchandise exports. The $73 billion error term in 1990 was unprecedented and might reflect a much greater use of new portfolio instruments outside the conventional financial channels which are not adequately surveyed in preparation of the United States balance of payments (see United States Department of Commerce, Survey of Current Business (March 1991), p. 35).

[13] If not for the Gulf crisis, the drop in both might have been greater, as the United States has been a traditional safe haven for financial assets in times of international strain.

table A.9). As discussed in chapter III, United States exports have indeed been responding to these incentives, as well as to the more rapid economic growth overseas.

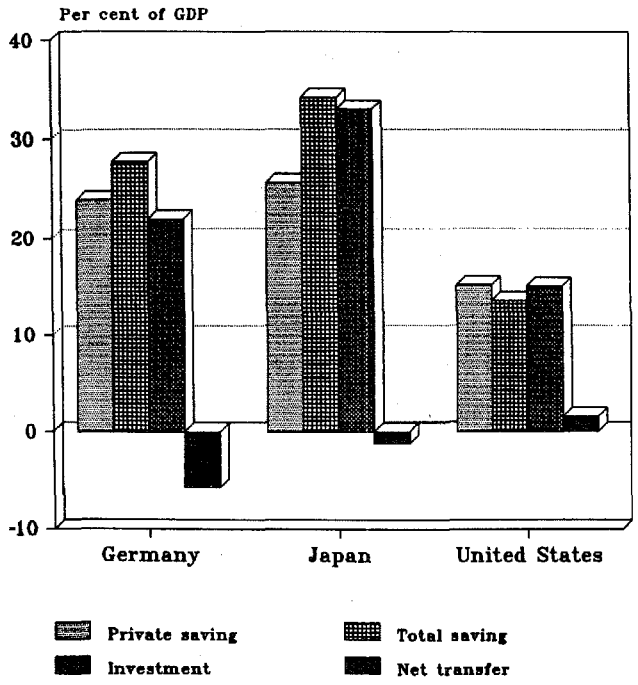
It is thus perhaps a tribute to the role of psychology in economic affairs that after the cease-fire in the Gulf war, the dollar rose rapidly in foreign exchange markets, especially against the Deutsche mark. The United States was mired in recession, the interest differential was against the dollar and, as at late April, looked likely to become more so. Admittedly, there were some reasons for investor caution in Europe, especially as the economic difficulties in the eastern *Länder* of Germany and in the Soviet Union were making clearer that economic transformation would be costly and prolonged. As a considerable financial burden might be borne by Western Europe, people could expect an uncharacteristic surge in inflation, except that overall, the European economies were slowing down. Indeed, to counter inflationary pressures, interest rates seemed likely to stay up across Europe, absent a realignment of the currencies in the European Monetary System (EMS), which seemed to be ruled out.[14]

As the new level of the dollar (about 15 per cent up against the mark and 5 per cent against the yen) was not underpinned by economic determinants, it might be unsustainable. Indeed, a return to a weaker dollar would be desirable, as it is in the global interest that the United States balance-of-payments deficit and net absorption of financial resources from abroad come to an end as soon as possible. With pressing needs for economic transformation in Europe and now economic reconstruction in the Middle East, not to mention the continuing need for greater resource transfers to capital-importing developing countries, the largest economy of the world remains a major absorber of foreign financial resources. Progress has already been quite substantial in that from over $150 billion in 1987, the peak year, the transfer was brought below $90 billion in 1990. But there is still a considerable distance to go.

Eliminating the net transfer to the United States requires progress on the domestic front as well as in trade performance. As may be seen in figure IV.3, total gross domestic saving in the United States is less than gross private saving, which is very different from what is seen, in particular, in Germany and Japan. The difference is government saving, or dissaving in the case of the United States.[15] The major cause of the dissaving is the United States Federal Government deficit which, having contracted in the past few years, grew in 1990 and is expected to grow again this year, mainly as a consequence of the savings and loan crisis in the United States financial sector (see discussion in chap. II).

On the basis of policies adopted thus far, there is little reason to believe that United States Government dissaving will be eliminated before the second half of the 1990s. Private saving is already sufficient to finance United States investment, although both the rates of private saving and investment are small

Figure IV.3. Gross domestic saving and its uses in three industrial countries, 1989




*Source:* Statistical annex table A.5.

when compared to those in Germany and Japan. It will take some combination of reduced government dissaving and increased private saving to push the net financial transfer to zero. If it were a priority of policy, it could be accomplished in a few years. Given how large the United States economy is, the 1990 net transfer could have been eliminated with an adjustment in domestic spending of only 1.6 per cent of the year's GDP.

## Sources of financial resource flows to developing countries

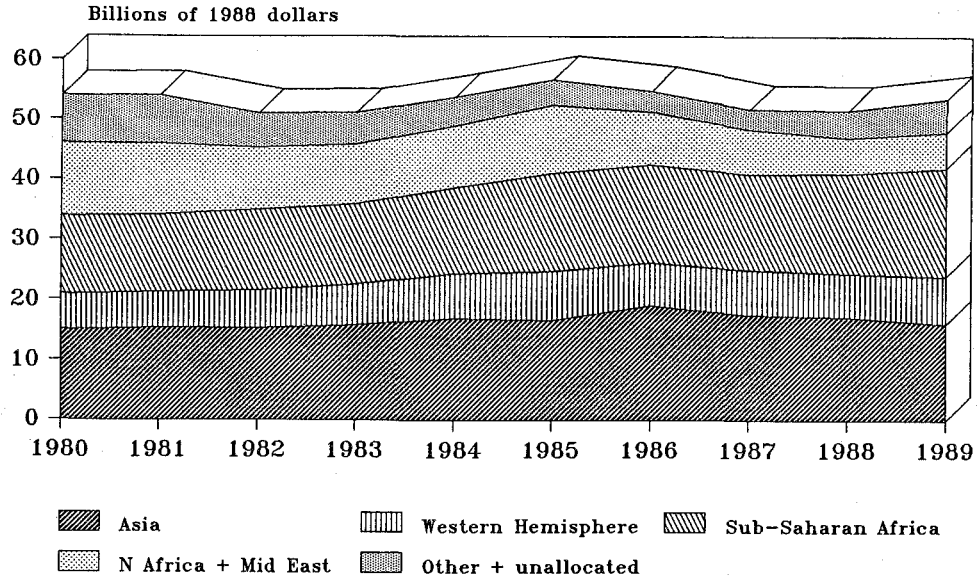
Although capital-importing developing countries continue to transfer financial resources abroad on a net basis, certain positive signs have been appearing within the overall picture. One is that the growth of direct investment flows that began in the late 1980s continued in 1990. New investment in 1990 was almost three times the level of the low point in 1986.[16] Some of the investment was financed by swapping developing country debt purchased at a discount for equity stakes in firms, including state enterprises being privatized (see chap. VII on debt buybacks and swaps), but some was traditional direct investment as well, especially in Asia. Moreover, although masked in aggregate data, a considerable amount of investment in Asian developing countries is now originating in other developing economies of the region, especially the four rapidly growing

[14] See the section below on how the "new" EMS operates.

[15] Government saving pertains to "general government", which consolidates all levels of government, social security funds, etc., as per national income accounting definitions. Private saving includes that of households nad enterprises (figure IV.3 shows data for 1989 because 1990 data are as yet unavailable for the government sector for each country; the pattern in 1990, however, is expected to be close to that shown for 1989).

[16] Although complete data for 1990 are not yet available, the trend was already visible in 1988-1989 when the four committed almost $8 billion to investment projects in Indonesia, Malaysia, the Philippines and Thailand, while Hong Kong alone registered $6.6 billion of investments in China (Hongkong Bank, Economic Report, November 1990). See also Y. W. Jun, "Korean overseas investment: patterns, characteristics and strategic behaviours", Asia-Pacific TNC Review 1990 (ESCAP/UNCTC publication series A, No. 7), pp. 53-65).

Figure IV.4. Receipts of official development assistance, 1980-1989




*Source:* OECD, *Development Corporation, 1990 Report.*

exporters of manufacturers, the "Four Tigers".[17]

A second positive development was a surge in official flows, both grants and new lending.[18] Unfortunately, it was a tragic event that prompted some of the flows, namely, the crisis in the Gulf and the need to assist countries that were particularly harmed by enforcing the United Nations embargo against Iraq, as established by Security Council resolution 661 (1990) to force Iraq to remove its forces from Kuwait. Mobilization of funds was coordinated through an informal Gulf Crisis Financial Coordination Group based in Washington, D.C., and funds were provided bilaterally and through emergency measures adopted by the International Monetary Fund (see below). Financing needs of 21 affected countries were discussed with the international community, *inter alia*, in consultations under article 50 of the Charter of the United Nations that were held with the Security Council through its committee established under resolution 661 (1990).[19]

Apart from responding to needs arising out of the Gulf crisis — or other emergencies — flows of official development assistance (ODA) have been rather stationary. As figure IV.4 shows, ODA measured in constant prices and exchange rates has been virtually constant since 1980. Aid to sub-Saharan Africa has increased, largely at the expense of assistance to North African and Middle Eastern countries. This reflects to a large degree the shift in the sources of ODA, as softening oil prices and war reduced the ability of major oil-exporting countries to maintain aid programmes. In 1989 their aid was little more than 10 per cent of the 1980 level and ODA increases from industrial countries were sufficient only to offset that decline (see table A.31).

For the future, the costs of reconstruction in the Gulf seem to preclude a large recovery in Arab aid flows and the economic difficulties of the Soviet Union and the Eastern European economies in transition suggest no possibility of significant aid programmes from that source in the near term (see chap. VI for additional details). Donor groups have traditionally differed in the geographical coverage and concentration of their aid programmes, but some additional allocations to new recipients may be needed in the light of the inability of traditional donors to continue their programmes, in particular when countries seek support for undertaking major economic reforms.

But the outlook for ODA from the largest donors, the members of the Development Assistance Committee (DAC) of OECD, is not especially buoyant.[20] Although French aid is expected to continue to grow substantially, as would that of Denmark and the Netherlands, which already provide about 1 per cent of their GNP as ODA, and although the steep drop in British aid in the 1980s has been replaced by a medium-term commitment to maintain the real value of British aid, the trend of

[17] Although complete data for 1990 are not yet available, the trend was already visible in 1988-1989 when the four committed almost $8 billion to investment projects in Indonesia, Malaysia, the Philippines and Thailand, while Hong Kong alone registered $6.6 billion of investments in China (Hongkong Bank, *Economic Report*, November 1990). See also Y. W. Jun, "Korean overseas investment: patterns, characteristics and strategic behaviours", *Asia-Pacific TNC Review 1990* (ESCAP/UNCTC publication series A, No. 7), pp. 53-65).

[18] Private lending arrangements (syndicated bank loans and other bank facilities, foreign and international bonds) for developing countries in 1990 were up slightly over 1989, but were broadly continuing at the reduced level of the latter 1980s (see table A.30).

[19] See "Letter dated 22 March 1991 from the representatives of Bangladesh, Bulgaria, Czechoslovakia, Djibouti, India, Jordan, Lebanon, Mauritania, Pakistan, the Philippines, Poland, Romania, Seychelles, Sri Lanka, the Sudan, the Syrian Arab Republic, Tunisia, Uruguay, Viet Nam, Yemen and Yugoslavia to the United Nations addressed to the President of the Security Council" (S/22382).

[20] The following draws heavily on the assessment of the secretariat of DAC (see OECD, *Development Co-operation 1990* (Paris, December 1990), pp. 136-153).

certain other European Community donors does not auger well for the growth of Community aid as a whole. The rapid increases in Italian aid appear to have levelled off and while the German Government is pledged to continue to provide a high level of ODA despite the budgetary effects of German unification, this does not seem to translate into substantial increases in real terms. Canadian and Scandinavian aid are set for significant increases in line with their announced ODA targets, but the outlook for United States ODA is uncertain.

Of the major sources of official development assistance, this leaves only Japan, whose aid programme grew rapidly in recent years, making Japan the largest donor in the world as of 1989. Further substantial increases in Japanese ODA may be expected, since Japanese aid as a share of GNP is still below the average for DAC member countries and the Government has set itself the goal of reaching that average (which was 0.35 per cent of GDP in 1988-1989).[21] To do so, the Government is committed to disbursing $50 billion in ODA in the five years, 1988-1992, which would double the aid provided in the previous five-year period. As $9 billion were provided in 1988 and 1989, aid disbursements during the rest of the plan period have to be somewhat higher if the goal is to be reached. The ODA target for the years after 1992 is currently under discussion and the idea of enlarging the target has considerable support.

While most ODA is disbursed bilaterally, almost a quarter is multilateral. In 1990, multilateral commitments rose about 6 per cent in real terms, mainly on the strength of the increase in credits arranged by the International Development Association (IDA), the concessional lending affiliate of the World Bank (see table A.33). The increase was made possible by the entering into effect of the ninth replenishment of IDA, which will allow for the commitment of $15.5 billion over three years (July 1990 to June 1993), thereby maintaining the real value of IDA lending at the level of the eighth replenishment (on top of which, more than $2 billion in principal repayments on outstanding IDA credits will be available for relending).[22]

Replenishment of other funds has also been agreed recently. In particular, in February 1991, donors agreed to replenish the African Development Fund, the concessional lending arm of the African Development Bank, with $3.4 billion for commitment until the end of 1993, about the same level as the previous replenishment. The 1989 agreement to replenish the International Fund for Agricultural Development also enabled the extension for a second phase of that Fund's Special Programme for Sub-Saharan Africa, which is supported on a voluntary basis by 22 industrialized countries and the European Community, as well as a number of African States.

Whether delivered bilaterally or multilaterally, aid flows in the 1990s are not set for significant real growth. This is a political reality that many analysts have deplored, but it is one that needs to be faced so as to ensure the most effective use of the limited aid that is available. A notable innovation in this regard that with appropriate support can make a significant contribution to aid effectiveness is the increasing cooperation of official aid institutions with non-governmental organizations. Some donors now channel a portion of their ODA through non-governmental organizations, although the latter also mobilize some $3 billion to $4 billion a year from private contributions. Even more significant, however, especially for ODA with an increasingly anti-poverty focus, is the growing willingness to involve non-governmental organizations in the aid-recipient country, whose expertise and grass-roots base can improve the design, selection and implementation of projects.[23]

Significant official aid can be mobilized, moreover, for projects and programmes with broad political support in donor countries. A case in point is the newly established Global Environment Facility, administered by the United Nations Development Programme, the United Nations Environment Programme and the World Bank, wherein 25 developed and developing countries will contribute up to $1.5 billion over three years for use on a grant or highly concessional basis in tandem with World Bank and United Nations assistance programmes.

In addition to using multilateral institutions as a channel for ODA, the international community established them to channel non-concessional resources, albeit making them available on financially easier terms than would be available to most borrowers in the private market. But in 1990, World Bank lending arrangements declined (see table A.33). The Bank explained that "where performance and policy change were not adequate in the Bank's judgement, lending was held back [as] was the case with respect to a number of large operations in fiscal 1990".[24] In particular, Bank lending in support of adjustment operations fell and totalled 18 per cent of the Bank's commitments in fiscal 1990; in 1989, it was 32 per cent.

At the International Finance Corporation (IFC), the World Bank affiliate that was established to promote the private sector in developing countries, loans and equity investment commitments stagnated in 1990 and the short-term prospects are not promising. IFC has started to plan for a possible slow-down in its programmes because of a failure of member countries to agree on a capital increase. The difficulty centres on the emphases to be set for IFC (and World Bank) lending before all donors agree to the increase in capitalization.

One highlight of the year's operations at IFC concerns the design of a new lending instrument known as the "Multi-country Loan Facility", under which IFC and an international commercial bank would provide matching funds, in foreign currency, to finance projects in a specified group of countries in which the bank was active through local branches, subsidiaries or offices. The aim is to bring IFC resources to bear on projects

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[21] See "Fourth medium-term target of official development assistance", 14 June 1988, as reprinted in Ministry of Foreign Affairs of Japan, *Japan's ODA 1989* (Tokyo, Association for Promotion of International Cooperation, 1990), pp. 133-134.

[22] The World Bank also mobilized $8 billion of concessional assistance for use during 1991-1993 under the second phase of its Special Programme of Assistance for Africa ($6 billion had been raised under the first phase, 1988-1990).

[23] The World Bank, for example, involved non-governmental organizations in 50 of 228 projects approved by the Executive Board in fiscal 1990, a marked increase over previous years (see Aubrey Williams, "A growing role for NGOs in development", *Finance and Development* (IMF/World Bank, December 1990), pp. 31-33); the Asian Development Bank foresees "a substantial expansion in the role of NGOs" in its lending programmes (*Annual Report 1989* (Manila, Asian Development Bank, 1990), p. 33).

[24] *Annual Report, 1990* (Washington, D.C., World Bank, 1990), pp. 12-13.

that are too small for regular IFC lending and to draw on the local knowledge and client relationships of the bank. In fiscal 1990, IFC approved such arrangements with three European-based banks.[25]

At the Inter-American Development Bank (IDB), the situation was quite different from that at the World Bank in 1990: non-concessional loans grew 48 per cent after rising by 52 per cent in 1989. This strong performance was a direct result of the agreement reached in 1989 on the Seventh General Increase in the Resources of the Bank that, after considerable delay and cutbacks in IDB lending, almost doubled the Bank's resources. It raised authorized capital by $26.5 billion, enabling it to lend $22.5 billion during the period 1990-1993. The new resources included a $200 million increase to the Fund for Special Operations, the Bank's concessional window.[26]

During the year, IDB approved its first sector loans — six in all — totalling $1.3 billion to five countries and accounting for approximately 35 per cent of the Bank's total lending. These were the first IDB loans not tied to specific projects and are co-financed with the World Bank. Furthermore, and in response to the "Enterprise for the Americas" initiative of the President of the United States announced on 27 June 1990, the IDB Board of Governors approved the creation of a debt reduction and debt-service reduction facility in October. It is to be an important component of the Bank's sector lending programme and could help member countries that are heavily indebted to foreign commercial banks provide enhancements in debt-reduction negotiations.

Finally, major developments of both a permanent and a temporary nature have taken place at the International Monetary Fund over the past year. With regard to the former, in June, the Board of Governors adopted resolutions proposing a 50 per cent increase in members' quotas — and thus a 50 per cent increase in access to borrowing — and the acceptance of a third amendment to the Fund's Articles of Agreement that aimed to treat cases of member countries that were deeply in arrears to the Fund on past borrowings and that were not cooperating with the Fund in trying to clear the arrears. The proposals are linked: the quota increase cannot take effect until the third amendment is adopted, the target for both being the end of 1991.

As it is, the developing countries were still rebuilding their drawing rights to the Fund in 1990 as repayments exceeded new disbursements, the net flow to the Fund being over $2 billion for the fifth straight year. The Fund also made fewer new lending commitments for a shorter average period and in a smaller average amount in 1990, compared to 1989 (see table A.29). Net disbursements may well increase in 1991, however, under new arrangements.

In the light of the Gulf crisis and the costs imposed on countries by the jump in oil prices, the dislocation of workers, the loss of income from remittances, transportation and other services, and the inability to trade or do business with Iraq and occupied Kuwait owing to the United Nations embargo, the Executive Board of IMF adopted a series of emergency measures on 15 November 1990. In essence, these measures increased the flexibility of disbursement and increased the effective maximum size of Fund arrangements. Low-income countries that have access to the concessional Enhanced Structural Adjustment Facility (ESAF) were enabled to borrow larger amounts and for an additional, fourth, year. Finally, losses from a wider range of services — including pipelines, canals, shipping, transportation, construction and insurance — as well as losses from the increase in oil prices (albeit the latter only to the end of 1991) would potentially qualify for drawings from the Fund's Compensatory and Contingency Financing Facility (CCFF).[27]

The explicit condition of the Fund's expanded assistance was that it be provided "primarily in the context of comprehensive adjustment programmes", employing the core of standard Fund arrangements, albeit suitably modified in the light of the international emergency.[28] The primary goal of the emergency programme seems to have been, in other words, to prevent the crisis from derailing already existing or prospective adjustment programmes. This is an important goal and not to be minimized. But it is a reminder of how far the Fund has come from the original concept, since abandoned, of support to countries caught in a temporary terms-of-trade squeeze through low-conditionality, rapidly disbursed resources.[29]

### Debt and debt servicing of developing countries

In one sense and after all that has happened in between, the debt situation of the developing countries in 1990 was not very different from what it was in 1980. That is, the debt-servicing ratio of the capital-importing developing countries was 18.6 per cent in 1980 and about 16 per cent in 1990 (see table A.35). Interest payments were almost 50 per cent higher than they were a decade before (and principal payments a little more), but since that was almost as much as export earnings grew during the period, the ratio of debt service to exports was little changed. Indeed, the ratio in 1990 was virtually the same as in 1989, although both were considerably lower than the peak ratio in 1982, almost 24 per cent.

This notwithstanding, the debt crisis of the 1980s has brought about major changes in the composition of the debt, principally in substituting debt to official creditors for that provided earlier by the private sector, mainly through commercial banks. The substitution has not only been at the margin; private creditors have also reduced their exposure in absolute terms. First, the private debt of countries that fell into debt-servicing difficulties and that was guaranteed by export credit agencies or other guarantors was directly transformed into official debt when the guarantees were exercised. In other cases, the outstanding debt was reduced when maturing credits were not fully replaced by

[25] See *Annual Report 1990* (Washington, D.C., IFC, 1990), p. 38.

[26] For additional details, see Inter-American Development Bank, *Annual Report 1990* (Washington, D.C., 1991), pp. 9-15.

[27] As at April 1991, arrangements under these provisions were agreed for 5 developing countries: Costa Rica, Ghana, India, Jamaica and the Philippines (arrangements were also announced for Bulgaria, Czechoslovakia, Hungary, Poland and Romania).

[28] See *IMF Survey*, 26 November 1990, pp. 356-357.

[29] On the operating mechanisms of the precursor to CCFF, see Louis M. Goreux, *Compensatory Financing Facility*, Pamphlet Series, No. 34 (Washington, D.C., IMF, 1980); on the evolution of Fund thinking about its role in adjustment policy, see Sidney Dell, *On Being Grandmotherly: the Evolution of IMF Conditionality*, Essays in International Finance, No. 144 (Princeton, Princeton University, October 1981).

new loans, which is what the Republic of Korea and certain other countries have done in recent years. Private debt was also erased directly or indirectly through repurchases by the debtor, generally at a discount under negotiated arrangements with the creditor banks.

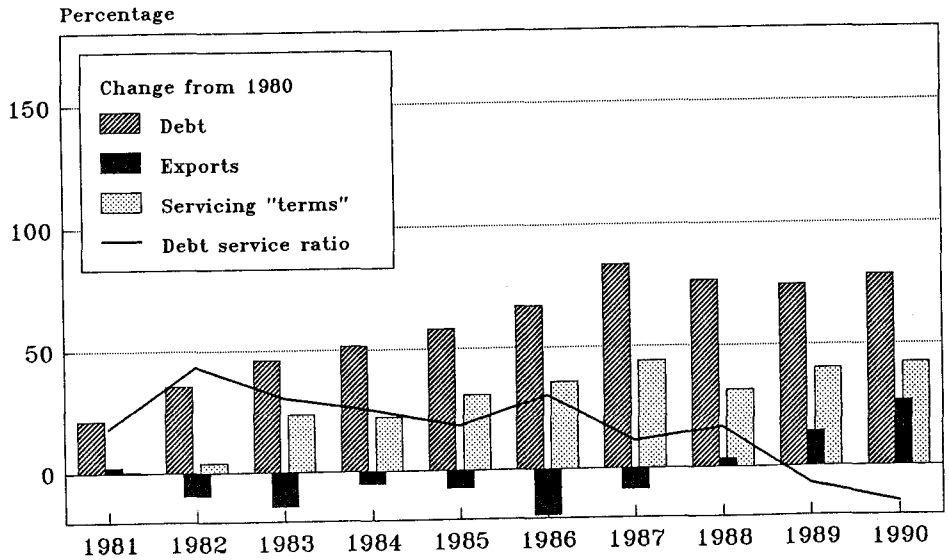
Largely owing to the latter type of operations, the 15 heavily indebted countries reduced their outstanding medium-term and long-term debt to private creditors from $330 billion in 1987 to little more than $260 billion in 1990 (see table A.34). Most other countries have tended to be rather more heavily indebted to official creditors, where options for reducing debt have been more limited. As a result, the share of total debt of the capital-importing developing countries that is accounted for by the 15 countries dropped from half in 1980 to little over 40 per cent in 1990.[30]

The aggregate debt itself rose in 1990 to a new peak of $1.2 trillion, after having been virtually unchanged since 1987 (see table A.34), but this was not because of a new surge in official or private lending. Net lending was some $8 billion more in 1990 than it averaged in the previous two years, after taking account of disbursements of new loans, principal repayments, debt reduction, rescheduling of interest and the accumulation of arrears; but the overall increase in the measured debt stock in 1990 was more a statistical phenomenon than a real one. It was mainly caused by the weakening of the dollar, which made a given loan in a non-dollar currency translate into a larger amount of dollars than previously.[31]

Indeed, when seen as a ratio to the earnings from exports of goods and services, the total debt fell slightly in 1990 (see again table A.35). That was the fourth consecutive year of decline in the ratio, which thus stood only 16 per cent above its value in 1980. In marked contrast, the debt-to-export ratio of the 15-country sample, which was almost 250 per cent in 1990, was far more than the 170 per cent in 1980, and that for the grouping of sub-Saharan Africa, excluding Nigeria, which was about 360 per cent in 1990, was more than twice its ratio of a decade earlier.

When debt-to-export ratios rise as the ones above have done, it normally implies that the ratio of debt-servicing to exports will rise as well. In the case of the 15-country sample, however, the debt-service ratio in 1990 was lower than it was in 1980. The reason lies in an improvement in what might be called the "average terms" of debt-servicing, i.e., the ratio of the debt service actually paid to the level of debt outstanding.[32] Over the years, as a result of reschedulings, interest-rate reductions and accumulation of arrears, the average terms of debt-servicing for the 15 countries have improved by more than 40 per cent over their level in 1980 (see figure IV.5).

Figure IV.5. Sources of the change in the debt servicing burden of 15 heavily indebted countries, 1981-1990



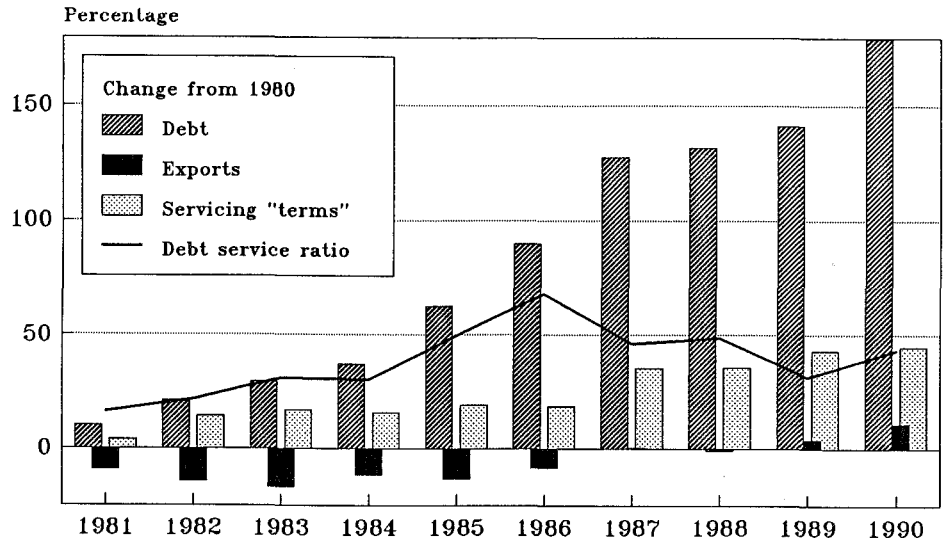

*Source:* UN/DIESA, based on data of World Bank.

[30] The options and experiences in reducing private and official debt of developing countries is assessed in chap. VII.

[31] More precisely, the sum of actual flows added $28 billion to total debt as measured by the World Bank in 1990, while the exchange rate adjustment added $46 billion. By the same token, the strengthening of the dollar in 1988 and 1989 was a major reason for the stagnation in the growth of debt in those years (see World Bank, *World Debt Tables, 1990-91*, vol. 1 (Washington, D.C., December 1990), p. 13).

[32] The expression is that of World Bank (see *World Debt Tables, 1990-91*..., box 4, which also motivated the analysis that follows).

Figure IV.6. Sources of the change in the debt-servicing burden of sub-Saharan Africa, 1981-1990[a]




*Source:* UN/DIESA, based on data of World Bank.

[a] Excluding Nigeria.

Improvements in the average terms of debt-servicing of roughly the same magnitude were not sufficient in the case of sub-Saharan Africa, however, to stem the worsening of its debt-servicing ratio (see figure IV.6). It rose by some 44 per cent over the decade despite the improvement in debt-servicing terms because lending to the region has continued at a relatively strong pace of 11 per cent a year on average, while export earnings have virtually stagnated.

With hindsight, the international strategy during the 1980s was off target in substantially increasing lending to the sub-Saharan region when it could not service debts already incurred and was not able to transform the capital inflows into adequately rising export earnings. The crucial difficulties in this case were partly that export volumes did not rise rapidly — in many years they did not rise at all — but mostly that the international pricing environment was generally adverse to commodity exports. For the 1990s, the emphasis apparently must be even more than heretofore to press for diversification of African production, not only within agricultural and traditional lines, but also into manufacturing for export, with all the physical and human infrastructure development that this entails and with access to industrial country markets kept open. In the short term, Africa also needs additional, special debt relief. In 1990, its actual debt-servicing burden was more than 50 per cent higher than that of the capital-importing developing countries as a whole. This is not a burden that the region is able to bear.

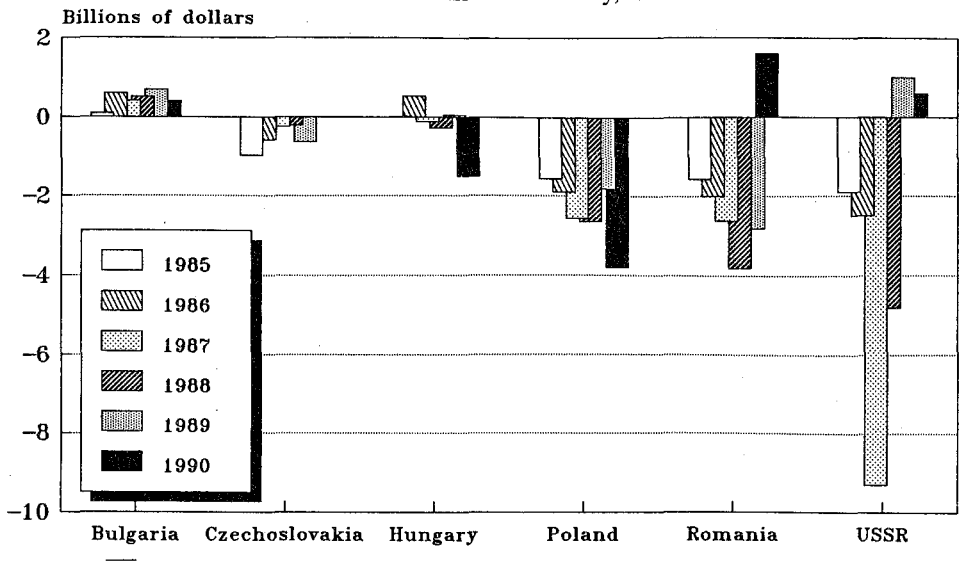
### International financing of reform in Eastern Europe and the Soviet Union

In Eastern Europe and the Soviet Union, as in the developing countries, foreign financing is needed to supplement domestic savings in order to raise investment levels and speed the structural adjustment process. Indeed, there was a net transfer of financial resources in hard currency to some countries of the region in 1990 and a larger transfer is expected in 1991. The biggest net transfers were to the former German Democratic Republic, Romania and the Soviet Union (see figure IV.7).[33] Net transfers were also made to Bulgaria, Czechoslovakia was in balance, but Hungary transferred about $1.5 billion abroad and Poland almost $4 billion.

In both of the "negative transfer" cases, however, part of the resources transferred were used to build up official foreign exchange reserves. In the case of Poland, the reserve increase was $3 billion. By the same token, some of the positive transfers were financed by sharply drawing down reserve assets. But the transfers were also financed in part by incurring arrears, underlining the as yet unsettled nature of the financial situation of the region. This is a region of middle-income countries that would normally be expected to draw mainly on private sources of international finance. Instead, intergovernmental credits and debt relief have become major forms of external financing in the area.

[33] Data are not available for a definitive estimate of the net financial transfer to the former German Democratic Republic in 1990, but inferences can be drawn from estimates of net investment income in previous years by the Economic Commission for Europe (see *Economic Survey of Europe in 1989-1990* (United Nations publication, Sales No. E.90.II.E.1), p. 203). That is, as data suggest that the current account deficit in convertible currencies was $2 billion to $3 billion in 1990 (up from about $1 billion in each of the previous two years), and as net investment income payments have been in the order of $1 billion a year, the net financial transfer was probably in the neighbourhood of $1.5 billion.

Figure IV.7. Net transfer of financial resources of Eastern Europe and the USSR in hard currency, 1985-1990




*Source:* UN/DIESA, based on data of IMF, United Nations Economic Commission for Europe and OECD.

**Dwindling confidence of international creditors**

Through much of the 1980s, commercial banks and export credit agencies lent to Eastern Europe and the Soviet Union, generally under regular business relationships, but also under concerted arrangements when countries could not continue normal debt servicing and thus required negotiated debt restructuring. All countries in the region are now viewed as somewhat hesitant credit risks by bankers. This does not mean that the markets are completely closed to them, but in each case save Poland, bankers tend to rate the regional economies as less secure credit risks than they were in 1990.[34]

This is echoed in a measure of "net vulnerability" produced by the OECD secretariat, which sets foreign exchange requirements for current account imbalances and debt amortization against official reserves and undrawn credit commitments: a negative number indicates a need to arrange gross borrowing to cover all obligations and thus a vulnerability to a loss of confidence by bankers. By that measure, the OECD secretariat views the situation in the region as "much more fragile" than in the mid-1980s and "at present, virtually all [the countries] are highly vulnerable to a loss of market confidence".[35]

The situation is also complicated by a perception in the financial markets that the kind of sharp adjustments to balance-of-payments crises made earlier in the 1980s, when imports were quickly and severely cut back, cannot be made again. Imports in a few countries have already been curtailed and exports promoted at the expense of domestic consumption and there is neither economic nor political room to repeat that effort. Moreover, great importance is being given to economic liberalization under which imports would grow.

An additional factor is that in these countries, as in the developing countries discussed previously, there is a more frequent resort to incurring arrears when financing difficulties loom. This was the case in Bulgaria in 1990, when it had to suspend principal payments in March and interest payments in June. Under a worsening economic situation that particularly affected exports to convertible currency countries, commercial creditors stopped advancing new credits and refused to roll over short-term loans.[36] The Bulgarian economy survived the year by completely draining its foreign exchange reserves and cutting imports sharply.

The Soviet Union also found itself in arrears in 1990, which made the international banking community quite nervous, since the USSR has had a long-standing reputation for complete and punctual debt servicing. Soviet officials stress that *Vneshekonombank* (the Foreign Trade Bank, the official Soviet debtor) consistently maintained the schedule of payments on official debt. The arrears were incurred on suppliers' credits extended to individual Soviet importers without the *Vneshekonombank* guarantee. It seems that this situation was created by a combination of two factors: decentralization of foreign trade decisions and, at the same time, preservation of centralized allocation of foreign currency. As discussed in chapters II and III above, the imperatives in combating the growing monetary overhang and consumer unrest resulted in a large increase in Soviet imports.

[34] A well-known, semi-annual poll of 75 to 100 international banks gave Czechoslovakia the top credit rating of the region, but behind 31 other countries; the Soviet Union was rated second in the region (39 in the global rankings), followed by Hungary (ranked 41), Romania (60), Bulgaria (62) and Poland (73), out of a global sample of 111 countries (see *Institutional Investor* (March 1991), pp. 145-151). The ratings for all countries, except Poland, fell over the past year, with Bulgaria and the Soviet Union experiencing large declines.

[35] OECD, *Financial Market Trends*, No. 48 (February 1991), p. 29.

[36] See Economic Commission for Europe, *Economic Survey of Europe in 1990-1991* (United Nations publication, Sales No. E.91.II.E.1), p. 101.

With the trade deficit increasing, foreign exchange was allocated to priority official payments, while the Government also arranged major foreign borrowings, sold substantial volumes of gold and made large-scale drawings on Soviet financial assets abroad. Indeed, in the first three quarters of 1990, the USSR withdrew over $7 billion in deposits from international banks. However, by the end of the year, $5 billion in arrears remained to be cleared.[37]

In the case of Poland, arrears were incurred with the consent of the international creditor community. In February 1990, the Paris Club of creditor Governments, holding two thirds of Poland's official debt, agreed to postpone all interest and principal payments until end-March 1991. Commercial bank creditors, which originally asked the Polish Government to pay 15 per cent of the interest due on the $9.1 billion of medium-term debt then outstanding, subsequently and reluctantly, agreed as well. In the short term, this took pressure off Poland, but total debt rose by almost 20 per cent to over $50 billion, including some new credits from the World Bank and other sources.[38]

### Special debt reduction agreement for Poland

In 1990, Poland's "shock-therapy" policy, as noted in chapter II, brought about a substantial trade surplus, and thus some of Poland's creditors have pressed for resumption of payments. But, having eliminated a large part of financial savings in the process of cutting down its monetary overhang and having lowered incomes through unemployment and reduced real wages, finance was needed for economic recovery and investment. Poland thus sought debt relief on a large scale.

At the last meeting of the steering committee of Poland's commercial bank creditors, held at London in January 1991, no agreement could be found on a partial write-off of Polish debt. Austrian, German and French banks were willing to write off all or most of the $10.6 billion owed to commercial bank creditors, but British and United States banks felt that forgiveness would set a dangerous precedent, committing them to write off the debts of the large Latin American debtors as well. The British and American banks wanted Poland to reschedule its debt under the Brady Plan.

On 1 March 1991, the Polish Ministry of Finance announced to the international press that it would not make payment on its interest arrears to foreign banks until they agreed to a major reduction on its debt. Any payments emerging from such an agreement would be limited to what Poland could pay out of future trade surpluses. The banks have not concurred.

In mid-January 1991, Poland had announced that it expected to reach a comprehensive agreement with major Western creditors in April that would reduce the $35 billion owed to Paris Club creditors. The Polish Government wanted to reduce this debt by 80 per cent. A division quickly emerged in the group of seven major industrial countries over the scale and form of any cut in Poland's official foreign debt. United States congressional leaders wanted a reduction closer to the 80 per cent sought by Poland than the 30 per cent suggested by some European Governments. Japan also had reservations about large debt write-offs. The attitude of Congress was important because a 10 per cent investment by the United States in the European Bank for Reconstruction and Development (see discussion of official financing below) is dependent by law on a sizeable Polish debt reduction package.

On 15 March 1991, the Governments meeting in the Paris Club agreed to forgive about half the $33 billion that Poland owes them, the creditor countries thereby offering extraordinary terms to help ease Poland's transition to a market economy. The creditors did not give Poland the 80 per cent write-off that it sought, but the plan is intended to cut interest payments by 80 per cent over the next three years. Maximizing relief at the plan's start was in recognition of the fact that repaying debt will be especially hard during the early years of economic reform. The package will reduce Poland's annual interest payments on its government-to-government debt from an estimated $3.3 billion to $660 million. Under the plan, creditor Governments are given three options for reducing Poland's debt: forgiving principal, offering below-market interest rates or transforming interest payments into principal and then offering low interest rates. The plan, which has two stages, calls on creditor countries to reduce the net present value of the debt by 30 per cent at the beginning of the first stage, which will last three years. When the second stage begins, an additional 20 per cent is cut. The first stage was contingent upon Poland's signing an agreement with IMF to restructure its economy, the second upon fulfilment of the terms of the IMF agreement.

In bilateral arrangements with the United States, Poland received an even larger reduction: 70 per cent of the $3.1 billion official debt is to be written off. Fifty per cent was included under the terms of the Paris agreement and another 20 per cent reduction was announced by the President of the United States on the occasion of the state visit of the President of Poland to Washington on 19 March 1991. Subsequently, France and Germany, too, agreed to a higher level of debt relief. Japan, however, has had reservations about deep debt reductions and has cancelled an anticipated credit to Poland in response.

The arrangement for Poland is pathbreaking. The creditor Governments claim that the Polish situation was unique and deserved special treatment because of Poland's pioneering role in Eastern Europe in embracing market reforms. Poland's situation was special, but it can be argued that the situations of many other countries are also special and the central significance of the agreement is that it recognized the higher order of magnitude of debt relief needed if a seriously overindebted country is to make progress at a politically acceptable rate in economic transformation and structural adjustment.

### Foreign private lending and investment

A different approach to foreign financing is being taken by Hungary. It has remained current on its debt-servicing obligations and promised to remain so even after the announcement

[37] Ibid., pp. 109-112; and IMF, World Bank, OECD and European Bank for Reconstruction and Development, *The Economy of the USSR: Summary and Recommendations* (Washington, D.C., IMF, December 1990), p. 10.

[38] The effect of exchange rate changes on the dollar value of debt, as noted above with respect to the developing countries, also affected Poland; i.e., actual lending was less than the rise in the debt outstanding.

of the Polish debt relief.[39] The foreign debt burden of Hungary is high; e.g., it pays over 5 per cent of GNP in foreign interest, compared to the 3 per cent paid on average by the severely indebted, middle-income countries.[40] The Government hopes that servicing the debt reliably and on time will maintain Hungary's access to international capital markets and encourage foreign direct and portfolio investment. The market, however, has not been completely impressed.

Hungary did arrange $989 million in gross borrowing in 1990, about half as much as the year before and all but $42 million of it in foreign or international bond issues.[41] Investors in bonds, mostly institutional investors, generally have less exposure to heavily indebted countries than banks do and Governments have tended to continue servicing bond debt even when no longer servicing debt owed to commercial banks. The willingness of bond holders to buy Hungarian bonds, especially in the light of its payment record as noted above, is thus expected. However, not only were bankers more reticent, but they created a liquidity problem for Hungary by withdrawing $1.3 billion in international interbank deposits in the second and third quarter, forcing a drain on reserves and an emergency, short-term loan from the Bank for International Settlements.

Hungary had certain difficulties with IMF in March of 1990, which might have jeopardized official lending that was to be used to meet heavy amortization payments on medium-term and long-term debt. But these difficulties were quickly resolved. Other things were also happening in the region at the same time, however, not least the moratorium on debt servicing by Bulgaria and the emergence of arrears in the Soviet Union. But in retrospect, in a year in which Hungary generated a record trade surplus in convertible currencies, the banks clearly overreacted. Indeed, by the fourth quarter of 1990 they seemed to realize this as interbank deposits began to be replenished.

Hungary suffered, in other words, from a problem familiar to Latin Americans, namely, a contagion effect whereby creditors to one country are extremely sensitive to adverse national developments and are very much affected by events in the entire region. Repeated requests of Poland for debt forgiveness, the rescheduling of debt announced by Bulgaria on 28 March 1990, the increase in the payment arrears of the Soviet Union and fast and wide-ranging political changes in several countries induced several foreign banks to withdraw their deposits from the National Bank of Hungary in early 1990. Thus, while Hungary does maintain access to private capital markets, for the time being there are distinct limits to the funds that it — or the other countries that still have access, in particular, Czechoslovakia and the Soviet Union — can raise there.

Hungary, like the other countries in the region, has also been seeking to encourage inflows of direct private investment, thus far with mixed results. Precise data on direct investment expenditures are not available for most countries. However, Hungary recorded $560 million of investment in 1990 on a balance-of-payments basis and investment in Poland was under $200 million.

These figures do not indicate the size or activities of the companies. In the Soviet Union, for example, more than 3,000 joint ventures with foreign firms had been established by the end of 1990, but less than half of them had actually started operations.[42] In addition, since Poland's new law on foreign direct investment came into effect in 1989, some 2,200 joint ventures were approved, including 856 in 1989 and more than 1,300 in 1990. Yet only 1 per cent of the total involves an investment over $3 million, a common feature for joint ventures in the region, which are generally not major production facilities. In Hungary in 1990 alone, 3,814 joint ventures with foreign capital were established, three times as many as in all the years before, putting their total number at about 7,500 at end-March 1991. Almost 50 per cent of them are engaged in commercial activity. On the one hand, these may be viewed mainly as distribution channels for imports of goods and services, but they are also an effort at market testing and development, which may be followed in later years by investment in local production.

The preconditions for attracting considerable direct foreign investment to Eastern Europe and the Soviet Union are in a way more demanding than those for government mobilization of foreign bank or bond finance. The latter requires international confidence in the repayment capacity in foreign exchange of the borrowing authority. The former also requires confidence in the host Government; but in addition, a legal and commercial environment that facilitates private operations is needed, one that makes taxation obligations clear and opens access to foreign exchange, all so that prospects for profits will not be unusually uncertain. This is part and parcel of the general requirements for movement to privatization in the region (see chap. II, box II.2), but it also has stimulated a spate of legislation specifically directed towards direct foreign investors.

The most important changes have concerned the legal forms of joint ventures, the permissible degree of foreign participation, rules of accounting and transfer of profits, reduction of tax rates, further investment incentives, and, finally, protection of foreign investment.[43] Recent developments, which give the flavour of the broader trends, include removal of restrictions on remittance of profits in Poland as at 1 January 1991 and Bulgarian legislation of 25 February 1991 which, *inter alia*, permitted acquisition of ownership rights over real estate, full profit repatriation and preferential tax treatment.[44] Romania introduced legislation in 1990 offering certain guarantees to investors, and new Hungarian legislation will allow foreigners this year to own property in their own right rather than only through a joint venture.

In the Soviet Union, the presidential decree of 26 October 1990 gave foreigners the right to establish wholly owned subsidiaries, as well as to hold shares of joint-stock companies formed from state enterprises after their "destatization". It is also expected that the new foreign investment regime will be more

[39] Magyar Távirati Iroda, *Econews* (Budapest, 21 March 1991), p. 1.

[40] Data of World Bank, *World Debt Tables...*, vol. 2 (country tables).

[41] Data of OECD, *Financial Statistics Monthly* (January 1991), sect. 1.

[42] USSR State Committee on Statistics, *Ekonomika SSSR v 1990 godu* (Moscow, January 1991), pp. 6-7.

[43] See Ewa Janczak, "A comparison of the joint venture legislation of Poland, Hungary, the GDR and Czechoslovakia", *Review of Socialist Law*, vol. 16, No. 3 (1990), pp. 279-304.

[44] See *Duma* (Sofia, 26 February 1991), p. 3.

clearly defined with the adoption of a new law on foreign investment that is in the final stages of the legislative process. Furthermore, a new foreign currency market was created in the first days of April 1991, where rouble earnings of foreign companies and joint ventures could be legally exchanged for hard currency at prices that more closely reflected market relationships.[45]

### Official finance for economic transformation

Despite these various measures, neither direct investment, nor private credits, nor even debt relief *per se* are expected to meet the foreign financing needs of Eastern Europe and the Soviet Union in the short term. In addition, the private financial sector's increasingly negative view of the uncertainties in the region is also shared by the official export credit agencies of the industrialized countries. Indeed, some "individual country risk ratings have been downgraded, availability of cover [i.e., guarantees] has been reduced, and premia required from exporters have been increased".[46] Moreover, repayments on loans that were guaranteed or supported by these institutions were already more than new disbursements to all countries of the region except Poland and the Soviet Union in 1989 and 1990.[47] This is, of course, also a function of the limitations on imports arising from balance-of-payments constraints which fall heavily on the kinds of goods, particularly capital equipment, that these agencies finance.

Nevertheless, Governments of the developed market economies have, both for political and commercial reasons, offered generous expansions of export credit facilities to Eastern Europe and the Soviet Union. For example, of the $12.8 billion in financial assistance pledged to Poland and Hungary by the Group of 24 (G-24), the main grouping of countries assisting the region,[48] over $10 billion were in the form of export credits and investment insurance and guarantees.

However, it is unlikely that more than a small fraction of these credits will be used. On the one hand, until the economic situation in the region stabilizes and growth resumes, the purchase of imported capital goods is likely to be quite limited. On the other hand, the borrowers in the region will increasingly be new entities, which might make it more difficult to find transactions that can be supported. Export credit agencies often do not have adequate information about private firms in Eastern Europe to make the necessary underwriting decisions. Commercial banks normally play a vital role in arranging such financing, but they will themselves be relatively new institutions or carrying out relatively new functions. Their experience in the field of international financing will be quite limited.

Another vehicle for lending in the short term is co-financing arrangements, wherein the export credit agencies would help finance the capital goods component of, say, a project supported by the World Bank. The co-financing agency then relies on the project evaluation of the international agency and helps to spread the risk of financing a project among more creditors.

In general, large public sector projects are selected for co-financing. The World Bank, however, recently developed a new co-financing arrangement in conjunction with export-credit agencies that is designed to assist private-sector firms. Known as the Export-Credit-Enhanced-Leverage programme (EXCEL), it will channel funds for financing imports through local development banks or similar financial institutions to medium-sized private sector enterprises and could well be applied in Eastern Europe.[49]

Even so, the reforming countries also need less restricted external resources, i.e., generalized balance-of-payments finance, and this is traditionally provided through the multilateral agencies. With the entry into IMF membership of Bulgaria and Czechoslovakia in 1990, all the Eastern European countries except Albania had become members, and processes have been set in motion that could ultimately lead to Soviet membership as well. As at the end of March 1991, adjustment programmes and their associated financing were in effect for Bulgaria, Czechoslovakia, Hungary and Poland (under stand-by or extended arrangements) and Romania was given permission to draw from the Fund's Compensatory and Contingency Financing Facility to ease the higher cost to it of oil and natural gas imports.

World Bank membership, which usually parallels that of IMF, also makes the region eligible for balance-of-payments loans (i.e., structural adjustment and sector loans), as well as the standard project financing. In early 1991, discussions were under way with some of the Eastern European countries concerning structural adjustment programmes, while Hungary and Poland had programmes already in place.

Balance-of-payments support, as well as humanitarian assistance, has also been provided through regional and bilateral channels. One such effort has been the PHARE programme (*Pologne/Hongrie: Assistance à la restructuration économique*), designed originally for Hungary and Poland in 1989 and extended to all Eastern European countries in 1990 (with Romania qualifying in January 1991).[50] Under PHARE, the European Community is providing food and medical aid this year and technical assistance grants, as well as loans through the European Investment Bank. Programmes were being arranged as well through the G-24 for Eastern Europe, generally to build up reserves, with one half of the financing to be provided by the European Community, and large contributions as well by Japan and Arab oil-exporting countries.

Humanitarian assistance (food, medicine and medical equipment) has also been provided to the Soviet Union and techni-

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[45] This is part of a broader effort to make the rouble convertible into hard currency as early as 1992 (see statement of the Deputy Chairman of the State Foreign Economic Commission in *Izvestia* (Moscow, 2 March 1991), p. 5).

[46] OECD, *Financial Market Trends...*, p. 33.

[47] Entails officially guaranteed or supported bank and non-bank trade credits for 1989 and at least half of 1990, as per Bank for International Settlements, *International Banking and Financial Market Developments* (Basel, February 1991), p. 21.

[48] The G-24 comprises the group of seven major industrial countries, the other members of the European Community, member countries of the European Free Trade Association, Australia, New Zealand and Turkey.

[49] For background on EXCEL and related programmes, see World Bank, *Annual Report 1990...*, p. 86.

[50] Yugoslavia is included in the PHARE programme, but assistance to the Soviet Union falls outside its scope.

cal assistance was pledged for 1991 at the Rome Summit of the European Community in December 1990. In addition, several bilateral official loans were arranged for the Soviet Union, mostly in the second half of 1990 and early 1991, which were partly of a general balance-of-payments nature and could be used, *inter alia*, to clear arrears to private creditors.[51]

Finally, in an unusual demonstration of how rapidly the international community can act in the financial arena when a consensus forms around an issue, a new institution, the European Bank for Reconstruction and Development (EBRD), was created in 1990 to lend to the region. Proposed at a European Community summit in November 1989, the Bank's charter was signed by 42 founding members in May 1990. It began operations on 15 April 1991 and, although a certain number of loans should be arranged during the year, the disbursements from these loans will likely be modest at first.

Taking account of these prospective and pledged resource flows to the region, along with the resources that might be accessed through the multilateral financial institutions and aggressive debt relief, it appears that the balance-of-payments constraint need not be a major hindrance to the pace of transformation in Eastern Europe in 1991, despite the outlook for international petroleum prices. In 1991, domestic factors and the collapse of the CMEA trade regime (as described in chap. III) may be the main determinants of the pace of economic growth in those countries.

The situation in the Soviet Union, however, is more uncertain. As discussed in chapter III, foreign exchange earnings may weaken in 1991. At the same time, import expansion is viewed as politically necessary. Thus, larger financial flows may be needed in 1991. The Soviet liquidity difficulties discussed above could limit the financial inflows, although the willingness of creditor Governments to continue to extend guarantees should temper this concern. Soviet reserves and other assets, especially gold, are still considerable, but the latter must be sold in small quantities if the sale is not to force a sharp drop in the international market price. As the year progresses, financial markets and government creditors will look for progress in stabilizing the balance-of-payments situation and in the longer-term process of economic transformation.

The extent of official financial assistance needed over the medium term by Eastern Europe and the Soviet Union will depend in particular on the success in building export markets and the encouragement that gives to new private financial inflows. Aside from imperatives of domestic stabilization and adjustment that are entailed, success will also depend on the region's main hard-currency export markets remaining open or opening further to trade expansion and the region's success in developing the ability to compete effectively in those markets.

## Forging monetary union in the European Community

In 1985 the member States of the European Community (EC) agreed to remove all barriers to trade, and to the free movement of capital and labour within the Community by the end of 1992. This programme, outlined in the Single European Act,[52] posed a number of questions for the operation of the Community's monetary institutions. With the exception of Greece and Portugal, all Community members now fix their exchange rates with one another within a currency grid, allowing rates to vary only within narrow bands. The removal of all barriers to capital movements within the Community, which is an integral component of the completion of the single market, will place considerable strain on this adjustable peg system. A major indication of these pressures is that countries are now very reluctant to adjust their parities for fear of losing the market's confidence in their ability to maintain any fixed parity at all.

But even in the absence of parity realignments, free capital movements are an ever-present threat to the stability of a system in which parities might be changed. Moreover, fixed parities between different currencies result in the system assuming most of the major characteristics of a single currency (convergence of inflation rates, interdependence of fiscal and monetary policy) without the benefits of a single currency (low transaction costs and predictable future contract values, and the development of the European currency as a major player on world markets).[53]

Faced today with the costs of a single currency but lacking many of the benefits, the Community has moved towards the establishment of a single currency in an Economic and Monetary Union (EMU). The European Community summit in Rome in December 1990 established two intergovernmental conferences, one charged with the responsibility of drawing up a treaty for EMU, the other with drawing up a treaty for closer political union within the Community. The two intergovernmental conferences are expected to report in the autumn of 1991 (see box IV.2 for a fuller background on the creation of EMU).

### Outline of a monetary union

The completion of the EC internal market by the end of 1992 and the achievement of monetary union, which is to be by the end of the century, will result in the creation of a powerful new economic entity within the world economy, an economy of 346 million people producing approximately one third of the output of the developed market economies. EC will become a single trading bloc, the members of which at present generate about 20 per cent of world exports.[54] The world will also acquire a new major currency, the European Currency Unit, or ECU. This extraordinary change in economic organization will inevitably have a considerable impact both on the welfare of EC citizens and on the overall operation of the world economy.

[51] For details on recent assistance efforts for the region, see *Economic Survey of Europe in 1990-1991...*, pp. 116-121.

[52] Commission of the European Communities, "The Single European Act", *Supplement to the Bulletin of the European Community*, No. 2/86.

[53] The political-economic "weight" of a major currency in shaping the world economy is impossible to quantify. A more direct economic benefit will derive from seigniorage, i.e., being able to import more goods and services over the long term than are exported because foreigners desire to hold the European Currency Units used in payment for the excess imports.

[54] Not including intra-EC trade.

**Box IV.2. Evolution of the concept and programme of European Monetary Union**

The desirability of monetary union has been a persistent theme within the European Community since its inception. This has derived, in part, from the belief that the Community economies would operate more efficiently within a system of fixed, if adjustable, exchange rates. The Bretton Woods system provided such a system "externally". However, the collapse of Bretton Woods and the growing integration of the EC economies meant that an internal EC exchange rate system was needed.

In 1970, the Werner Report presented proposals for the creation, in stages, of what would today be called a single market, the abrogation of many economic policy decisions to Community institutions, and finally, the establishment of free capital movements and irrevocably fixed exchange rates.[a]

The objective of economic and monetary union was accepted at the Community summit in March 1972. The only concrete outcome of this agreement, however, was the establishment of the currency "snake" in April 1972. This took the form of a commitment to maintain 2.25 per cent limits to changes in exchange rates among EC currencies, the whole to float within a wider set of parities related to the dollar. The currency "snake" did not survive the rise in oil prices and the floating of the dollar in 1973. France, Italy and the United Kingdom left the snake shortly after the dollar float. France subsequently rejoined and left again. At the end of the 1970s only Germany and the Benelux countries remained within the system.

The process of EC monetary cooperation was revived at the December 1978 summit. All member States agreed to create a new European Monetary System (EMS), built around a fixed Exchange Rate Mechanism (ERM), within which currency fluctuation would be confined to a 2.25 per cent band either side of a parity defined in terms of the European Currency Unit (ECU), a basket of EC currencies.[b] Intervention agreements between the central banks and operated via the European Fund for Monetary Cooperation and the Bank for International Settlements were to assist in maintenance of parities, especially in periods of stress that could be regarded as essentially short term. These intervention mechanisms were supplemented in the Basel-Nyborg agreements of 1987, which made provision for intramarginal intervention, cooperative short-term interest rate management and other more flexible means of maintaining parities.[c]

Since the establishment of ERM, realignments have been the subject of negotiation and agreement between the members of ERM — not determined unilaterally. All the then member States of EC joined EMS in 1979. But, even though the British pound was part of the ECU bundle and the Bank of England participated in the ECU creation mechanisms, Britain declined to join ERM. Italy joined with intervention bands set at 6 per cent.

There were seven occasions on which parities within ERM were realigned between its establishment in March 1979 and a general realignment in 1983. Since 1983, realignment has become rare, there being four occasions on which rates were changed up to January 1987, and none at all since then. Indeed, several Governments, notably that of France, have expressed their hostility to further realignments. In the early period, parity changes offset an average of 90 per cent of the differences in inflation rates. From 1984 to 1987, parity changes offset only 50 per cent of inflation differences and, of course, there has been no offset since then.[d] In effect, the system has moved from a "crawling peg" into a fixed rate system. Spain (which joined the European Community in 1986) joined ERM in 1989, with 6 per cent bands. The United Kingdom joined ERM in 1990, again with 6 per cent bands. Italy moved from 6 per cent bands to 2.25 per cent bands in 1990. Only Greece and Portugal have not yet joined ERM, though the Governments of both countries have stated that it is their intention to do so.

The negotiation of the Single European Act in 1985, which set in motion the process of the completion of the European internal market by the end of 1992, provided the incentive to exa-

[a] Commission of the European Communities, *Interim Report on the Establishment by Stages of Economic and Monetary Union* (Brussels, 1970).

[b] The composition of ECU is currently: Deutsche mark 30.36 per cent, French franc 19.32 per cent, Belgian franc 7.78 per cent, Italian lira 9.87 per cent, British pound 12.6 per cent, Dutch guilder 9.49 per cent, Danish krone 2.52 per cent, Luxembourg franc 0.31 per cent, Spanish peseta 5.15 per cent, Portuguese escudo 0.78 per cent, Greek drachma 0.71 per cent, Irish pound 1.11 per cent. A peculiarity of setting parities in terms of ECU is that the parity changes with a realignment of a constituent currency. In reality, central banks have tended to ignore ECU parities, and have related their activities to a currency grid based on the Deutsche mark (see Karl Otto Pöhl, *Britain and EMU* (London, Centre for Economic Performance, London School of Economics, 1990), p. 5).

[c] For institutional details and texts of the Basel-Nyborg agreements, see Horst Ungerer and others, *The European Monetary System: Developments and Perspectives*, Occasional Paper No. 73 (Washington, D.C., International Monetary Fund, November 1990), pp.8-9 and 87-89.

[d] *European Economy*, No. 44 (October 1990), p. 42.

The establishment of EMU will also mean that there is a single monetary policy throughout the European Community, which is to be managed by a European Central Bank (EuroFed). All member States will hand over their monetary policy to EuroFed, give up the possibility of any realignment in exchange rates, give up the ability to monetize fiscal deficits[55] and accept that level of fiscal coordination that proves to be necessary within a monetary union. However, fiscal policy instruments will remain predominantly national, and national boundaries will define the geographic limits to tax and benefit systems, and to the greater part of public expenditure.

This division between Community-level monetary policy and national fiscal policies is determined partly by political factors

[55] A Government monetizes a fiscal deficit by selling bonds to the central bank, which, in making the purchases, increases the money supply and possibly inflation. Abuse of this power has been the bane of inflation fighters, but in a period of economic recession, it can form part of an appropriate monetary and fiscal policy package.

mine the institutional changes required for the establishment of monetary union. The 1988 summit established the Delors Committee, consisting of the 12 central bank governors and three independent experts, which presented its report in March 1989 recommending a three-stage process towards an Economic and Monetary Union (EMU).[e] A summit meeting in October 1990 confirmed the acceptance of the three-stage strategy by 11 of the 12 member Governments (the exception being the United Kingdom). At a subsequent summit at Rome in December 1990, the member States set up two intergovernmental conferences, one to negotiate a treaty for the establishment of economic and monetary union, the other to negotiate a treaty creating greater political union.

The Delors Report proposed that Economic and Monetary Union should be approached in three stages:

**Stage one**

Monetary: Completion of the internal financial space; enhanced monetary and exchange rate coordination; realignments to become infrequent; all EC currencies to join the "narrow-band" of ERM; extended use of ECU.

Economic: Completion of the internal market; strengthened competition policy; full implementation of the reform of the regional assistance funds; enhanced policy coordination and surveillance; budgetary adjustments in high-deficit countries.

**Stage two**

Monetary: Establishment of the European System of Central Banks (ESCB), otherwise known as EuroFed; possible narrowing of the ERM bands.

Economic: Evaluation of stage one policies; review of national macroeconomic adjustments.

**Stage three**

Monetary: ESCB in charge of monetary policy; irrevocably fixed exchange rates or ECU established as a single currency.

Economic: Definitive budgetary coordination; possible strengthening of regional and structural policies.

Stage one began on 1 January 1990. It is to be completed by 1 January 1994 when, provisionally, stage two is to begin. Stage three is provisionally to begin on 1 January 1997 and to be completed by the end of the century.[f]

The intergovernmental committees are due to report back to an EC summit towards the end of 1991. Whether the political momentum that derived from the Single European Act will be maintained is not clear. A number of Governments, notably those of Germany and the United Kingdom, have suggested that progress towards EMU should be slower than previously envisaged, i.e., stage two should begin later than 1994.

There are also growing uncertainties concerning the constitution and role of the European System of Central Banks. The Delors Report envisages an organization rather similar to the central bank of Germany, the Bundesbank, which is independent of governmental control and constitutionally bound, first, to pursue policies that maintain price stability, and second, to support the economic policies of the German Government. However, given the limited role of EC political institutions, doubts have emerged about both the concentration of power in EuroFed and the Community-wide agency whose policies it would be statutorily bound to support. A further difficulty concerns the role of EuroFed in the transition from stage two, in which the responsibility for monetary policy still rests with national central banks, to stage three, in which responsibility will switch to EuroFed. The sudden switch is dictated by the necessary indivisibility of responsibility for monetary policy. But doubts have been raised concerning the viability and wisdom of a sudden switch to a previously untried organization.

[e] Commission of the European Communities, *Report on Economic and Monetary Union in the European Community* (Brussels, 1989).

[f] The steps proposed for monetary union are far more concrete, both analytically and institutionally, than are the steps towards economic union, which derives in part from unresolved differences over the role of policy outside the narrow monetary arena.

and partly by appeal to the Community principle of "subsidiarity", that the power to make decisions should rest at the lowest possible level at which it is effective. National political authorities are defined by their taxing and spending powers. So it is not surprising that EC member States are reluctant to hand over such powers to the European Commission, which oversees Community affairs in Brussels, still less to the European Parliament, whose responsibilities are limited.

The Bretton Woods system, under which the world's exchange rates were managed from the end of the Second World War until 1973, can serve as a point of reference for comparison. It had established a fixed exchange rate system between sovereign autonomous fiscal units, punctuated only rarely by parity realignments. Indeed, so stable was Bretton Woods that those currencies that have been long-term members of the "narrow-band" Exchange Rate Mechanism[56] experienced even less varia-

[56] Belgium, Denmark, France, Germany, Ireland, Luxembourg and the Netherlands (see box IV.2).

tion in their relative parities from 1961 to 1969 than has typically been the case within ERM (see table IV.3). However, under the Bretton Woods system, unlike within ERM, national monetary and fiscal policies were shielded behind an elaborate structure of capital controls and a variety of trade restrictions and subsidies.

Table IV.3. Instability of exchange rates of the members of the "narrow-band" Exchange Rate Mechanism, 1961-1990

| | Nominal effective exchange rate relative to member countries[a] | Nominal effective exchange rate relative to 19 industrial countries[a] |
|---|---|---|
| 1961-1969 | 0.9 | 0.8 |
| 1970-1971 | 2.5 | 2.2 |
| 1972 | 1.6 | 2.0 |
| 1973 | 4.9 | 2.0 |
| 1974 | 4.0 | 3.6 |
| 1975 | 4.0 | 4.1 |
| 1976-1978 | 4.4 | 3.8 |
| 1979-1980 | 1.8 | 1.7 |
| 1981 | 2.0 | 6.8 |
| 1982-1985 | 2.9 | 3.2 |
| 1986 | 3.2 | 6.4 |
| 1987 | 2.9 | 3.9 |
| 1988 | 1.0 | 1.4 |
| 1989 | 0.3 | 1.4 |
| 1990 | 2.0 | 5.4 |

*Source*: *European Economy*, December 1990, p. 144.

[a] Unweighted average of the absolute annual percentage change of the currencies originally participating in the "narrow-band" of ERM

Or compare ERM with mature "monetary unions", such as Canada, Germany or the United States, within each of which there is a single currency and free capital movements. All these monetary unions deploy relatively large central budgets, which act as a means of maintaining the overall fiscal balance of the economy, of mitigating regional differences in incomes and productive potential and of offsetting regional shocks. No such centralized fiscal system is planned for the European Community.

Whether this novel structure will prove to be economically effective depends in the first instance on whether national economies have a relatively uniform response to EC-wide monetary policy measures. To the extent that, say, France and Germany are similar in competitiveness and in economic structure, then they are likely to respond in a similar manner to the use of policy instruments — an optimal policy for one is optimal for the other too. If, however, national economies (or regional economies for that matter) are markedly dissimilar — as dissimilar as Germany and Portugal, or as the south of England and the north of England — then not only is a policy mix that is optimal for one member State likely to be sub-optimal for another, but also the differences in response may well exacerbate disequilibria. Not only might the need, say, for economic policy stimulus differ in the component States of the union, but the capacity to bring such a stimulus to bear may differ among the countries. An interesting case, for example, is whether national fiscal policy would be adequate to deal with the differential impact on industry in Germany and Spain of a substantial change in the common external exchange rate against the dollar.

Recognition of the potential difficulties arising from differences in the economies of member States has led to an emphasis on the need for "convergence" of national economies in the movement towards monetary union. However, there is little clarity about the exact meaning of "convergence", or the relationship between particular indicators of convergence and the attainment of uniformity of policy response. Monetary stability would require only stability of inflation rates and interest rates. But convergence in rates of inflation, for example, might be attained when one economy is growing relatively rapidly and another is in recession, not a policy outcome that can endure for an extended period. Moreover, as will be discussed below, even if the underlying structures of national economies have converged towards a potentially sustainable pattern, differences in economic performance may still be created by the segmentation of responsibility for the operation of economic policy instruments.

### The "new" EMS as precursor of monetary union

While the institutional detail of EMU must await the outcome of the two intergovernmental committees now in progress, some of the economic consequences can be detected in the recent development of ERM. In particular, there are already clear indications of the likely effects of the combination of monetary union and fiscal segmentation in the more recent experience of the countries that are members of ERM.

Since 1987 there have been no realignments of parities within ERM,[57] and there is a clear intention among members to avoid realignments if possible. The absence of realignments, together with the closer monetary cooperation established in the Basel-Nyborg Agreements of 1987 (see box IV.2) and the removal of controls on capital movements, have resulted in the characterization of the post-1987 ERM as the "new" EMS — a system of fixed exchange rates and integrated financial markets. This is in contrast to the "old" EMS, which was essentially a crawling-peg buttressed by barriers to the movement of capital.

The new EMS therefore approximates the operation of a monetary union. However, the current state of affairs clearly differs from monetary union in two important respects: first, monetary policy is still the responsibility of the member States; and secondly, although currently fixed, it is still possible that exchange rates might be changed.

While monetary policy is the responsibility of the authorities of the member States, it is becoming increasingly clear that not all member States have control over their monetary policy. Fixed exchange rates, free capital movements and autonomous

[57] Other than the Italian "quasi-realignment" in January 1990. The lira had fluctuated within 6 per cent bands around the central parity. In reducing fluctuations to the more typical 2.25 per cent bands, the Bank of Italy took the opportunity to move its reference parity down by 3.7 per cent.

monetary policies are incompatible. The exercise of monetary authority has therefore become essentially "asymmetric". German monetary policy has been determined primarily (though not absolutely) by German domestic concerns, whereas the policies of other members have largely been determined by the need to maintain the parities of their currencies with the Deutsche mark. It is this asymmetry that has established the German inflation rate as the "reference point" of EMS.[58]

In an era of free capital movements, the disruptive potential of even the possibility of exchange rate changes has greatly increased the importance of maintaining currency "credibility". The "new" EMS has been created by the desire of members of ERM to convince the markets of their commitment to maintain their parity with the Deutsche mark, whatever might be the implications of that commitment for the conduct of domestic monetary policy. This has produced some paradoxical results.

Since credibility plays a vital part in the determination of capital flows, the attainment of a credible commitment to the new EMS has resulted in the over-funding of current account deficits in high-growth, high-inflation, high interest rate members such as Italy and Spain, pushing their exchange rates to the top of the permitted trading band. The credibility of the fixed rate means that the high nominal rate of interest in Spain translates into a very high real rate when compared to, say, the German rate of inflation. However, some lack of credibility over the British commitment to its entry parity, notably in light of the coexistence of large current account deficits with domestic recession, has resulted in a persistently weak pound.

The degree to which the conduct of European monetary policy will be changed with the establishment of EMU, and the transfer of monetary policy from the Deutsche Bundesbank to the European System of Central Banks can only, at present, be a matter of speculation. However, the draft constitution for EuroFed requires it to pursue monetary policies that strengthen price stability. It would therefore be following policies similar to those of the Bundesbank, policies most nearly related to the domestic concerns of Germany.

### EMU and national economic management

Under the single EC monetary policy, there will be a single rate of monetary expansion, a single structure of interest rates and a single external exchange rate. Each of the member States, including Germany,[59] will have given up all tools of monetary policy, which will now be determined by an independent EuroFed.[60] Evaluation of the likely effects of EMU amounts to assessment of the scale and implications of the loss of national autonomy.

With monetary policy determined by EuroFed, most of the weight of national economic management will fall to fiscal policy. European monetary union will not be accompanied by fiscal union. On the contrary, fiscal policy will remain the predominant responsibility of the member States, with the central budget of EC remaining comparatively small (it is at present equal to about 1 per cent of Community GDP).

This notwithstanding, the fiscal stance taken by one member State would not be independent of that taken by others. An expansionary policy pursued in one country will spill over into others, raising savings and tax revenues. The interdependence of fiscal policy is recognized by the Commission in the call for greater fiscal coordination through the Council of Economics and Finance Ministers (ECOFIN). But this still amounts only to coordination. Budgetary transfers between member States are explicitly ruled out by the Delors Report (see box IV.2).

Beyond the general desire for fiscal coordination, the Delors Report fears that monetary union might result in fiscal laxity. Hence, it recommends against monetization of deficits by national authorities and urges agreement that the EuroFed and other EC central authorities would not come to the aid of a member State that was financially embarrassed as a consequence of having borrowed excessively.

The Delors Report also suggested that there should be binding constraints on the size of the fiscal deficits that might be incurred by member States.[61] This provision was subsequently dropped, but the Commission preserves a bias against national budget deficits. Given the greater role that fiscal policy will inevitably play in a monetary union, it is not at all clear why deficits are regarded as inefficient while surpluses, which may depress demand throughout the Community in critial periods, are regarded with equanimity.

### Convergence within monetary union

It has become commonplace that a necessary condition for a successful process of economic and monetary integration within EC is greater economic "convergence" among member States. The fundamental characteristic of convergence as far as the European Commission is concerned[62] is convergence in the rate of price inflation (differences in nominal wage inflation should be associated only with differences in productivity growth, including the productivity gains of "catching-up").

However, the Commission also draws attention to the need for:

(a) Some convergence in public budget imbalances — this is taken to mean that public sector deficits should not be

[58] The factors that establish the position and role of Germany within EMS are the industrial dominance of Germany within EC, which translates into persistent German current account surplus and the low inflation rate "anchor" of the Deutsche mark (see Richard Portes, "Macroeconomic policy coordination and the European Monetary System", *CEPR Discussion Paper*, No. 342 (London, Centre for Economic Policy Research, 1989)). The unification of Germany and the costs of the economic transformation of the eastern *Länder* may interrupt this set of relationships (see below).

[59] The president of the Bundesbank has commented that "Monetary policy decisions can only be taken by a single entity. Even under a federative system, monetary policy must remain indivisible...In the European Central Banking System, therefore, it will not be possible for the national central banks to have autonomous monetary powers of their own: they will only be the operational arm of the European Central Bank" (Karl Otto Pöhl, *Britain and EMU* (London, Centre for Economic Performance, London School of Economics, 1990), p. 9).

[60] "Independent" in the sense that, within the terms of its statutes, EuroFed will determine EC monetary policy. The Board of EuroFed will be appointed for fixed terms and will not be subject to political recall. Its position will therefore be similar to that of the Deutsche Bundesbank within Germany.

[61] Commission of the European Communities, *Report on Economic and Monetary Union in the European Community* (Delors Report) (Brussels, 1989), para. 30.

[62] The Commission's evaluation of the impact of Economic and Monetary Union is presented in a report by the Directorate General for Economic and Financial Affairs, entitled *One Market, One Money*, published as a special issue of *European Economy*, No. 44 (October 1990) (see especially, pp. 37-39).

"excessive...leading to exploding public debts";

(b) Convergence in external account imbalances (though national "current accounts disappear as an issue...when there is a single currency");

(c) Convergence in policy preferences (or "at least" policy objectives).

Although the fall in the rate of inflation during the 1980s has been shared both by members of ERM and by non-members (indeed, the proportionate fall in the rate of inflation has been greater for non-members), there has clearly been a significant convergence in the inflation record of members of ERM, particularly the founding members of the "narrow-band" ERM (see table IV.4).

Table IV.4 Private consumption deflators: members of the "narrow-band" Exchange Rate Mechanism and the European Community as a whole, 1979-1990

| | "Narrow-band" countries | | Community | |
|---|---|---|---|---|
| | Average[a] | Dispersion[b] | Average[a] | Dispersion[b] |
| 1979-1980 | 8.0 | 3.7 | 12.2 | 5.4 |
| 1981 | 9.3 | 3.6 | 12.1 | 4.7 |
| 1982-1985 | 5.7 | 2.3 | 8.1 | 4.4 |
| 1986 | 1.2 | 1.4 | 3.8 | 4.2 |
| 1987 | 1.8 | 1.2 | 3.5 | 2.9 |
| 1988 | 2.0 | 1.0 | 3.7 | 2.7 |
| 1989 | 3.2 | 0.7 | 4.9 | 2.6 |
| 1990 | 3.0 | 0.4 | 5.1 | 3.5 |

*Source*: *European Economy*, No. 46 (December 1990), p. 153.

[a] Weighted average.

[b] Unweighted arithmetic mean of each country's absolute deviation from the weighted average.

However, this convergence in the rates of inflation was accompanied by very low rates of economic growth in Belgium, France and the Netherlands, and a generally low rate of growth in all ERM countries up to 1987. The burst of growth since 1987 has slowed sharply in mid-1990, and it is not yet clear whether the attained convergence at low rates of price inflation is sustainable.

Defining convergence in terms of relative rates of inflation alone overlooks the fact that, while a monetary union among countries with similar rates of inflation could be sustained, the inflationary convergence might be achieved at the cost of very divergent performances in the real economies. If convergence is to be associated with economic balance in the Community, then price convergence must be accompanied by sustained balance between the rate of growth of demand and the rate of growth of supply within each major region and each State. If that balance is not maintained, then the difference must be met by resource transfers and, if sustained over the longer term, the accumulation of national or regional net debt. The real economy measure of effective convergence prior to monetary union should thus be the ability of each country to sustain an appropriate balance on current account (appropriate in the light of the pattern of long-term capital flows) at rates of growth that maintain high levels of employment.

This definition of convergence does not require that productivity be uniform throughout the monetary union; indeed, even price inflation might not be uniform. What is necessary is that the variety of factors that determine the growth of demand and supply (price, productivity, investment, income distribution, fiscal balance and so on) should, taken together, ensure a long-term balance of aggregate demand and supply. A protracted excess of demand over supply brings about an excessive accumulation of net external debt and an "adjustment problem" familiar from the experiences of developing and Eastern European countries.

The Commission appears to associate excessive regional or national "external" imbalances with public sector imbalances:

> "The need for convergence towards a sustainable external equilibrium is less apparent since the external current account disequilibria that exist at present might be financed without difficulty once capital markets are completely integrated...[F]urther convergence in external current accounts is desirable from a policy point of view only if the current disequilibria reflect excessive public dissavings. It is therefore not evident that further policy action would be necessary to correct current account imbalances once sound public finances have been achieved in all member countries."[63]

But, the accumulation of excessive debt, either by the public sector or the private sector, will lead ultimately to an external adjustment whether or not there is a monetary union. In separate States, it occurs through the foreign exchange markets and associated reductions in purchasing power; in a monetary union, through the bond markets.[64] In either case, it will take the form of a fall in the rate of growth of demand, with associated downward adjustment in real income relative to partner countries, and possibly increased unemployment or emigration. The need for "external" balance is the same — inside or outside a monetary union, and whether the public sector accounts are in balance or not.

In fact, trade balances have not converged within EC. Rather, there has been a significant divergence, particularly in trade within the Community. National balances of trade within EC have been dominated in the past few years by trade with Germany — with all countries other than Ireland experiencing growing deficits. Since variations in real exchange rates have been relatively small, especially in recent years, these trends in trade balances suggest that the economic growth rate relative to Germany is a major determinant of a member State's trading performance.

This was clearly the case in the French expansion from 1981 to 1982, when France grew at 1.6 per cent and Germany at -1.0

[63] *European Economy*, No. 44 (October 1990), p. 209.

[64] Actually, the real exchange rate can adjust even if the nominal rate is fixed. But within either the "new" EMS or in a monetary union, the real exchange rates between deficit countries and Germany can only be lowered by deficit countries sustaining a slower rate of inflation than Germany.

per cent. Of the $4.5 billion decline in the French trade balance that occurred in the year, 40 per cent was attributable to deteriorating trade with Germany. But equally, and more generally, deteriorating trade with Germany has been the major determinant of the trade performance of virtually all EC members (with the exception of Ireland) during the recent expansion.[65]

Whether the trade balance with Germany becomes a constraint on growth throughout EC depends on the ability of the deficit countries to finance their deficits. The scale of the recent German surplus and the relative paucity of long-term capital outflows from Germany, at least before 1990 (see table A.26), suggest that the real economy definition of convergence was not being met within EC.

The lack of convergence imposes a fundamental asymmetry on national economic policies, an asymmetry that was familiar on a wider scale during the Bretton Woods period. Essentially, deficit countries were forced to limit the growth of their deficits, while surplus countries needed to do nothing. The action for deficit countries would consist of a devaluation of their currency, or a slow-down in growth relative to surplus countries, or (most likely) a combination of both. In every case, the deficit country suffered a reduction in growth of real income. Long-term difficulties could arise when the asymmetry was self-perpetuating, as those countries that were forced to grow slowly tended to invest less and to suffer a cumulative decline in competitiveness. This asymmetry is also present within the operation of ERM, and will not be removed by EMU.

There is thus a dual asymmetry with the economic organization of EC: the asymmetry in monetary policy formation and an asymmetry in the impact of trade on domestic policy. Both, of course, derive from the same source, the competitive dominance of the German economy. The asymmetry in monetary policy will disappear with the formation of a monetary union (even if EuroFed policy is formulated on similar principles to Bundesbank policy, the parameters of policy will be EC-wide, not solely German). But monetary union alone will not overcome the imbalance that derives from the failure to achieve real convergence.

The reaction to unbalanced trade is not confined to deficit countries, but imposes a deflationary bias on the entire trading system as deficit countries deflate and there is no domestic pressure on surplus countries to expand. In deficit countries, policy is constrained by international priorities. In surplus countries, for policy not to be made with respect only to domestic concerns requires a commitment to coordination and a regional perspective. Absent this, deflation would be contagious, since the slowdown in deficit countries cuts back surplus country exports. The more closely integrated the trading system, the more powerful will the contagion be.

The competitiveness of the German economy compared with its partners ensures that their attainable trend growth rates are constrained by the growth rate of the German economy (the constraint being modified by long-term capital flows). And as the importance of intra-EC trade in relation to total trade grows, the growth constraint imposed by the trading asymmetry will become more severe.

There is, however, a major qualification. The absorption of the five new eastern *Länder* within Germany is resulting in an acceleration in German growth, combined with some deterioration in the average competitiveness of the country as a whole. The acceleration of the German growth rate will help other countries to grow faster without running large trade imbalances with Germany. The special problems created by the need to absorb the low-productivity economies of the eastern *Länder* will place great pressure on the German investment goods industries, with demand spilling over to other parts of EC. This will tend to reduce, although perhaps only temporarily, the imbalance in EC trade patterns.

### The need for strong policy responses

The problems of trading asymmetry arise from differences in relative competitiveness as between countries and regions. Attainment of economic and monetary union might be expected to increase the possibilities of adjustment by means of greater flexibility in wages and larger long-term capital flows. However, the single market and the monetary union will need to be in place for a number of years before EC becomes a unified financial area. Even so, the experience of large federal economies does not suggest that either mechanism will prove sufficient to make a significant reduction in inequalities in regional incomes and competitiveness.

Differences in GDP per capita among the States of the United States net of redistribution brought about by the activities of the United States Federal Government are not only of similar magnitude today to the differences among EC countries, but have also persisted over long periods of time. Differences in GDP per head among the Canadian provinces are greater than among the member States of EC.[66] However, at lower levels of disaggregation, income differentials are greater within EC. The segmentation of the European labour market provides greater scope for wage differentials than may exist in linguistically homogeneous States. Significant wage differentials in the United States have not led to long-term convergence in regional economic performance, but instead have induced labour migration on a scale that might prove neither politically acceptable nor economically efficient within EC.

In the circumstances of the 1990s both political cohesion and macroeconomic efficiency in EC will require a method of recycling persistent surpluses and alleviating persistent regional and national deficits. Significant divergence in competitiveness must be offset by transfers for long-term investment or it will result in persistent differences in rates of growth (which ultimately tend to exacerbate the imbalance). Even relatively loose international arrangements such as the Bretton Woods system could not survive without long-term transfers from the more competitive to the less competitive.

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[65] German reunification has caused a major departure from this pattern. An important question is whether the earlier patterns will reappear once the adjustment process in Germany is well along.

[66] See *European Economy*, No. 44 (October 1990), p. 230, and Commission of the European Communities, *Report of the Study Group on the Role of Public Finance in European Integration* (MacDougall Report), vol. II (Brussels, 1977), chap. 5.

The scale of intra-EC trade is such that the members of EC more closely resemble regions of a single State rather than separate States within the Bretton Woods system. Yet single States, whether unitary or federal, possess powerful budgetary mechanisms to redistribute income towards less prosperous regions. In an EC Commission study of three unitary States (France, Italy and the United Kingdom) and five federations (Australia, Canada, Germany, Switzerland and the United States), interregional transfers were found to offset about 40 per cent of regional inequality. Nevertheless, net interregional transfers were not themselves large proportions of GDP — 2.5 per cent in the United States, 3.7 per cent in the United Kingdom and 4.2 per cent in Italy.[67] By contrast, although inequalities within EC are at least as great as within the major federal States, EC regional policies offset only 0.25 per cent of the inequality in income per capita among the member States at the time of the study by means of expenditures amounting to 0.02 per cent of Community GNP.[68]

Single States use a variety of methods to redistribute income, in particular personal income tax, public expenditure programmes and social security benefit systems. So long as a country has a progressive fiscal revenue and benefit system, and public expenditure provides roughly equal per capita benefits, then income is transferred automatically from relatively prosperous to relatively poor regions, limiting the relative decline in the standard of living in the poorer regions. This will not be the case within EC.

Countries also employ intergovernmental grants or tax-sharing arrangements. Grants and revenue sharing generally redistribute income according to specific criteria such as income per capita or fiscal capacity. Australia, Canada and the United States (until revenue sharing was abolished in the previous Administration) had major federal grant systems. In Germany, transfers are made directly among the *Länder*. In Britain, the rate support grant plays a similar role. No such large-scale transfers as yet take place among member States of the Community.

Finally, States also provide specific-purpose grants. The United States makes the greatest use of such specific transfers, notably by means of food stamps and urban renewal programmes. The regional and social funds of EC fall into this category of transfer programme, as does the Common Agricultural Policy.

The EC report also noted that regional transfers within federal and unitary States were not only a means of securing a more equitable distribution of income, but also played a major part in funding the implicit "balance-of-payments" deficits of the poorer regions — recycling the regional surpluses of the more prosperous areas. In the United Kingdom, for example, public financial inflows covered an average of 70 per cent of the regional balance-of-payments deficits of Northern Ireland, Scotland and Wales. In Germany, 60 per cent of the regional deficits of Niedersachsen, Schleswig-Holstein and Saarland were funded by public transfers. At the same time, Britain's more prosperous regions (South-east and West Midlands) funded a public outflow equal to 130 per cent of their regional balance-of-payments surplus, and the more prosperous regions of Germany (Baden-Württemberg, Nordrhein-Westfalen and Hessen) provided an outflow equal to 87 per cent of regional surplus.[69] These regional transfers played an important part in the maintenance of macroeconomic stability in Germany and the United Kingdom. If the transfers had not been made, overall growth of national product could have been sustained only by more rapid growth in the prosperous regions (growth rates that may well have created other economic difficulties), or by an accumulation of debt in the poorer regions, or both.

### The missing element in the EMU design

It has been suggested that while the European Community was effectively pursuing the goals of efficiency of resource allocation and monetary stability, Community institutions were dealing less well with problems of regional imbalance and the maintenance of economic growth.[70] These deficiencies are in danger of being carried forward in the design of EMU.

The peculiar combination of monetary union and segmented fiscal autonomy between the member States of the European Community will tend to exacerbate regional differences, limit real convergence, result in an overall EC growth rate that is lower than would otherwise be the case, and might make the absorption of shocks more difficult. It may also be damaging to social and political cohesion.

The ultimate source of the difficulties is differences in levels and rates of growth of productivity among the EC countries. The very limited centralized fiscal mechanisms that do exist within EC — notably the Regional and Structural Funds, which are to be expanded — are designed to mitigate the impact of regional differences in competitiveness. However, they are not enough and pressures for some centralization of fiscal policy (not just coordination, but greater centralization of taxing and spending) would be expected. But they would be present even if competitiveness were uniform throughout EC when EMU is inaugurated because countries are still subject to "shocks", i.e., major unforeseen events with large-scale economic consequences, and these have differential effects.

It is difficult to see the institutional mix now planned being long maintained. Either the Community will tend to move towards a more centralized fiscal system to complement EMU or EMU itself will be placed under considerable strain.

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[67] Commission of the European Communities, *Report of the Study Group...*, p. 42.

[68] Ibid., p. 61.

[69] Ibid., p. 33.

[70] See T. Padoa-Schioppa, *Efficiency, Stability and Equity: A Strategy for the Evolution of the Economic System of the European Community* (Oxford, Oxford University Press, 1988).

# Chapter V

## ENERGY

The crisis in the Persian Gulf during the second half of 1990 dominated the global energy scene because of the magnitude of the increase in oil prices and deep apprehensions with regard to the security of oil supplies. At the same time, environmental concerns were increasing, with the world scientific community reaching tentative conclusions on climate change and the desirability of preventive action aimed at the reduction of carbon dioxide caused by the use of conventional energy fuels.

The first part of this chapter concentrates on trends and prospects in the international oil market, while the second focuses on some aspects of energy policy formulation and the environment.

### The international oil market

The events in the Persian Gulf, as well as in Central and Eastern Europe and the Soviet Union during 1990, had a great impact on the world oil market and may be expected to influence global energy trends and prospects for many years to come. The restructuring in the Soviet Union and Central and Eastern Europe has revealed great energy inefficiencies and large-scale environmental problems.

Following the invasion of Kuwait by Iraq on 2 August 1990, the trade embargo imposed by Security Council resolution 661 (1990) cut off more than 4 million barrels per day of exports from those two countries, or 7 per cent of world consumption. This and market speculation resulted for a while in a doubling and tripling of oil prices, with consequent shock effects on many national economies.

The crisis brought to the fore a variety of issues, including the continuing vulnerability of the oil-importing developing countries and the countries of Eastern Europe, the importance of production capacities of member countries of OPEC and the inadequacy of intergovernmental arrangements, which had been put in place after the energy crises of the past two decades.

To meet these energy challenges, a variety of ideas have been put forward for consideration by the international community, including the proposals of France at the International Monetary Fund for establishing a global oil buffer stock and of the President of Venezuela at the forty-fifth session of the General Assembly for a United Nations petroleum conference.

The Gulf crisis was preceded by relative stability in the world energy situation, particularly in the oil market. During the whole of 1989, the combination of growth in oil consumption and stagnation in non-OPEC oil production had raised demand for OPEC oil though some of the member countries had already reached the limits of their production capacities.This stability was quickly eroded during the first half of 1990 owing to overproduction, with oil prices once again dropping to their 1988 levels.

World attention often focuses on the beneficial effects of lower oil prices on consuming countries. However, any considerable fall in oil prices has dramatic and destabilizing effects on the oil-exporting countries, several of which depend on oil for much of their national income and their foreign exchange earnings. As government budgets had to be scaled down, lower oil prices since 1986 have caused recession, with consequent political instability in such countries and friction among them and other countries as well.

The Gulf crisis during 1990 caused an additional oil import outlay of about $53 billion - $41 billion from the developed market economies, $2 billion from the countries of Eastern Europe and $10 billion from the oil-importing developing countries. Because of their high dependence on oil for their overall energy requirements, low per capita income, foreign indebtedness and lack of foreign exchange, the impact was particularly severe in many countries of Eastern Europe and the developing world. Loans and credits from the International Monetary Fund and other multilateral arrangements, as well as ad hoc bilateral assistance from oil-exporting developing countries, helped to mitigate the impact. In many countries, however, this did not prevent shortages, rationing and loss of output. The vulnerability of these countries to oil crises calls for serious attention and consideration.

While Security Council resolution 661 (1990) was binding on all States Members of the United Nations, no adequate arrangements were put in place for an equitable sharing of the costs and benefits. The member countries of the International Energy Agency (IEA) had ample strategic oil reserves and commercial stockpiles. However, the developing world and the countries of Eastern Europe had few stocks of their own and had to bear a considerable share of the negative consequences.

Incremental oil revenues benefited oil-exporting countries - $39 billion for the member countries of OPEC, $8 billion for non-OPEC oil-exporting developing countries and $6 billion for Canada, Norway, the United Kingdom and the Soviet Union.

The countries of the Persian Gulf, both OPEC and non-OPEC, possess two thirds of the world's proved oil reserves, or 657 billion barrels; these are reserves that have been discovered and can be put to use at very low cost.

This geologic phenomenon needs to be taken into account in analysing global energy trends and prospects, including environmental concerns and measures aimed at reducing the consumption of fossil fuels.

Energy projections to the year 2000 and beyond indicate that demand for OPEC oil, especially from the Persian Gulf, will increase substantially because of the stagnation in production in non-OPEC developing countries and a continuing reduction in oil output in the United States and the Soviet Union.

However, the gap between OPEC production capacities and demand for its oil has been narrowing in recent years. Prior to the Gulf crisis, production capacities in OPEC member countries were estimated at 27-28 million barrels per day, with de-

mand for their oil reaching 24 million barrels per day. As demand increases, unless action is taken to expand production capacities, another energy crisis must be anticipated within the next few years. Despite their vast proved oil reserves, questions arose regarding the ability of OPEC countries to expand production capacities, since most of them were experiencing serious financing restraints. The need for international cooperation to ensure long-term stability in the oil markets had become evident.

The Gulf crisis and, in particular, the devastation and destruction of oil facilities in Kuwait and Iraq underscore the urgency of such cooperation. The objective of international cooperation should be to provide security of supply to consumers and security of markets to producers so that investments can be made on time to meet higher demand levels. At the same time, consuming countries and producing countries should aim at consultations and cooperation on future energy plans, especially when new directions are contemplated.

Table V.1. Impact of the Gulf crisis: estimated 1990 incremental oil export revenues and oil import outlays[a]
(Billions of dollars)

| | |
|---|---|
| *Incremental oil export revenues* | 52.8 |
| Developed market economies | |
| (Canada, Norway, United Kingdom) | 3.8 |
| Soviet Union | 2.5 |
| Developing countries | 46.5 |
| OPEC member countries | 38.9 |
| Other oil-exporting countries | 7.6 |
| *Incremental oil import outlays* | 52.8 |
| Developed market economies | 41.0 |
| Eastern Europe | 1.8 |
| Oil-importing developing countries | 10.0 |

*Source:* UN/DIESA.

[a] Based on 1990 average oil price of 22.2 dollars a barrel.

## Impact of the Gulf crisis

A marked slow-down in the world economy was apparent prior to the Gulf crisis, with reduced growth rates in the developed market economies and the developing world and deep recession in Central and Eastern Europe and the Soviet Union. The overall effect of the Gulf crisis has been estimated to have reduced world output by 0.2 per cent.

The rise in oil prices in the second half of 1990 was the result of deep anxieties connected with the prevailing threat of war in the Middle East and the possible destruction of oil facilities and consequent shortfalls in supplies of this crucial commodity to the world economy. However, the rise in oil prices, although sharp, was short-lived. The increase in average oil prices in 1990 as a whole over 1989 was about 27 per cent, while in the previous crises of 1973/74 and 1979/80, price increases were as high as fourfold and twofold, respectively.

Incremental oil export revenues and oil import outlays for 1990 are estimated in table V.1. With the exception of Canada, Norway and the United Kingdom, all the developed market economies are net oil importers. Their combined incremental outlay for oil imports in 1990, as compared to 1989, is estimated at $41.0 billion, with nearly half of this amount borne by Japan and the United States. On the other hand, Canada, Norway and the United Kingdom benefited by approximately an extra $3.8 billion.

All the countries of Eastern Europe are net importers of oil. In the past, most of their oil requirements were met by the Soviet Union under a price formula based on the average world oil price of the previous five years. As a consequence of restructuring and economic reforms, the special economic relationship between the Soviet Union and its CMEA partners began to undergo fundamental changes in early 1990. The Soviet Union's demand for payments for part of the oil imports in hard currency, and the cutbacks in its supplies, resulted in oil shortages and prompted Eastern European countries to look for new sources, notably Iraq. Before the eruption of the Persian Gulf crisis, Bulgaria, Hungary and Poland signed contracts with Iraq to import crude oil and Romania was already an established importer of Iraqi oil.[1]

In addition to other losses resulting from the implementation of the trade sanctions against Iraq and Kuwait, it is estimated that the oil import bill of the countries of Eastern Europe amounted to approximately $8.1 billion in 1990. This represented an increase of about $1.8 billion over 1989.

Despite the recommendation of OPEC member countries in their meeting on 29 August 1990, that additional supplies from OPEC should be primarily directed towards the developing world, many of the oil-importing developing countries faced severe supply shortages. They were last-in-line to secure oil supplies due to their shortages of foreign exchange and the lack of an emergency oil sharing scheme similar to the arrangements already in place since the 1970s for the developed market economies in the context of the International Energy Agency. In order to suppress oil consumption, a number of countries raised domestic prices of oil products and resorted to rationing.

Nevertheless, a number of special oil supply arrangements between oil-exporting and oil-importing developing countries have been reported. For example, Nigeria pledged to supply oil at favourable prices to several African countries including Gambia, Kenya and Uganda.[2] Arrangements under the San Jose Accord by which Mexico and Venezuela have been supplying oil since the early 1980s to twelve Caribbean and Central American countries at favourable prices continued. Similarly, several South and East Asian countries entered into special oil deals with Indonesia, Iran (Islamic Republic of), Malaysia and Saudi Arabia in order to replace lost supplies from Iraq and Kuwait.

The additional cost of oil imports for the oil-importing developing countries is estimated at $10.0 billion or 33 per cent more in 1990 as compared to 1989. Nearly half of this amount was borne by Brazil, Cuba, India, the Republic of Korea, Singapore, Turkey and Yugoslavia.

With the exception of Iraq and Kuwait, all OPEC member countries drived higher revenues from both higher oil prices and

[1] "Gulf crisis buffets Eastern Europe oil sector", *Oil and Gas Journal*, 11 February 1991, p. 38.

[2] *Platt's Oilgram News*, 30 August 1990 and 18 October 1990.

expansion of output. The combined value of their oil exports reached its highest level in nearly 8 years at $155 billion, or $38.9 billion higher than that of 1989 (see table A.38). Per capita oil export revenues improved to $325 as compared to a low of $183 in 1986 and a high of $807 in 1980.

Among the countries of OPEC, the biggest beneficiaries of incremental oil revenues in 1990 were Iran, Nigeria,Saudi Arabia, the United Arab Emirates and Venezuela. In contrast, Iraq lost $9.2 billion and Kuwait $5.0 billion worth of oil revenues in 1990.[3]

In addition to OPEC, another sixteen developing countries are net exporters of oil. The additional 1990 oil export revenues to these countries are estimated at $7.6 billion. The biggest beneficiaries were Mexico ($1,970 million), Oman ($830 million), Angola ($700 million), Malaysia ($620 million) and Egypt ($570 million).

In 1989, the Soviet Union exported 3.7 million barrels per day, or 12.3 per cent of the world's total oil exports of 30 million barrels per day. Exports in 1990 are estimated to have fallen to 3.3 million barrels per day with incremental oil revenues at $2.5 billion.

### Extreme volatility of oil prices

World oil prices strengthened significantly in 1989, declined sharply during the first half of 1990 and then surged in the second half of the year to levels not seen since 1980. Prices began to decline in the early months of 1990, largely in response to the over-production of OPEC during a period of unusually mild weather and weak oil demand. Average oil prices fell by nearly 30 per cent from $19.30 in January to $13.50 per barrel in June. By the end of July, prices had moved up to about $17 per barrel, on expectation that production rates in Kuwait and the United Arab Emirates would be cut back to their quotas. Market expectations were in fact realised at the Conference of OPEC on 27 July 1990 when it was decided to increase the target price of oil to $21 from $18 a barrel which was felt to be achievable at a combined output of all OPEC member countries of 22.491 million barrels per day as compared to the actual production of 23.6 million barrels per day during the first seven months of 1990.

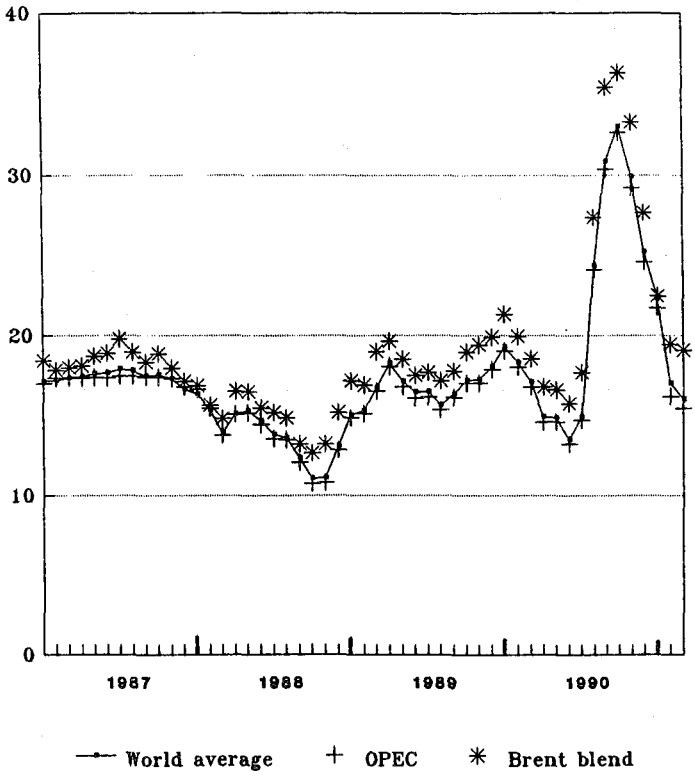
Within a few days of the OPEC Conference, Iraq invaded Kuwait and prices started to rise uncontrollably as trade sanctions were imposed on Iraq and occupied Kuwait and the military build up gave sufficient cause for widespread panic and fears of a regional war. After a few weeks of confusion and uncertainty, the OPEC Ministerial Monitoring Committee met in Vienna on 29 August and decided to increase output as swiftly as possible in order to compensate for the lost supplies from Iraq and Kuwait. Prices went down for a while as replacement volumes of crude particularly from Saudi Arabia, United Arab Emirates and Venezuela began to appear in the market. But threats of war and uncertainty as to the magnitude of spare production capacities heightened market worries and pushed the price of key benchmark crudes to the highest level in a decade reaching $40 a barrel by the end of September. By then, OPEC member countries were able to make up some two-thirds of embargoed Iraqi and Kuwaiti oil, adding 2.7 mbd to the market, with total OPEC output nearing 23.5 million barrels per day.[4]

Despite the steady recovery in supplies not only from OPEC but also from non-OPEC sources, principally the North Sea, Australia and several other producers, spot prices of major crude oils continued to show large swings in October oscillating between $30 and $41 per barrel in response to daily speculation and rumors and due to the absence of a safety margin of spare production capacity. Prices surged on the threat of war, but they also dropped as supply increased and markets adjusted. Oil prices eased slightly in November and December, with less volatility than before, ranging between $25 and $30 a barrel. The softening was prompted by increased confidence on the supply side combined with a decline in demand growth and to some extent by more careful speculation with regard to the outcome of the crisis.

In the last five months of 1990, the average spot price of the OPEC basket of seven crudes was $29.70 a barrel as compared to $16.80 a barrel in the first seven months of the year. For the whole year, the average price is estimated at $22.20 a barrel, representing an increase of 27 per cent over that of 1989 (see figure V.1).

Figure V.1 Crude oil prices, f.o.b.

(Dollars per barrel)




*Source:* UN/DIESA, based on United States Department of Energy, Energy Information Administration, *Weekly Petroleum Status Report*, 1987-1991 issues.

[3] Assuming an oil price of $21 per barrel and that Iraq and Kuwait would have abided by their quotas of 3.14 and 1.5 million barrels per day, respectively, as set at the OPEC Conference on 27 July 1990.

[4] *Petroleum Economist*, October 1990, p. 42.

With the outbreak of the air war on 16 January 1991, the price of crude oil fell the next day by a third in response to early reports of no significant Iraqi counterattacks that would endanger Saudi oil fields and to the announcement by some industrialized countries to release stocks. The price for West Texas Intermediate (WTI) tumbled by more than $10 to $21.4 a barrel, the biggest one-day slide ever. The sharp slide was in complete contrast to earlier forecasts that oil prices could soar to as much as $70-100 a barrel as soon as the war started because of fears of destruction of oil production facilities and for damage to tankers in the Persian Gulf.

As Saudi Arabian oil production and export facilities in the Gulf remained mostly untouched by the short war, and the market refocused on supply and demand fundamentals, prices remained in the $20 range for the rest of the first quarter of 1991.

Throughout the seven months of the Persian Gulf crisis, from August 1990 to February 1991, a controversial issue with regard to oil prices was the management of the strategic oil stockpiles that had been built up by member countries of the International Energy Agency after the oil crises of the 1970s.

At the outbreak of the crisis, government-owned stocks were estimated by the International Energy Agency at about 1,000 million barrels of oil, of which 590 million barrels were stockpiled by the United States. A number of independent experts, as well as officials from OPEC, called repeatedly for an adequate release from the strategic oil reserves in order to avoid excessive volatility in oil prices and the consequent damage to the world economy. Member countries of OPEC, in particular, emphasized that the expansion of their output to the full extent of their production capacities should be accompanied by such a release so that price levels could be kept stable for the benefit especially of the fragile economies of the oil- importing countries in Eastern Europe and the developing world. Apart from a small experimental release of 5 million barrels from the United States strategic reserves in October 1990, the emergency oil sharing scheme of the International Energy Agency was activated only at the outbreak of the air war.

In retrospect, it may be surmized that calculations indicated the possibility of a more prolonged war with the probability of destruction of oil production and transportation facilities in the Persian Gulf. Given the calculations, Governments were probably more concerned about the possible shortfalls in oil supplies than about higher oil prices and their effects on national economies. In any event, this experience brought to the fore once again the vulnerability, especially of the oil-importing developing countries, to oil crises and the need to address this issue in the context of international cooperation.

## Slower growth in oil consumption

In the three years following the oil price collapse of early 1986, world oil consumption had increased to 65.7 million barrels per day, at an average annual rate of 2.2 per cent. However, in 1990, demand for oil remained stagnant (see table V.2). This stagnation was partly due to lower economic growth in all regions, higher oil prices, mild weather conditions and, in some cases, shortages of supplies, particularly in the oil-importing developing countries and Eastern Europe.

In the developed market economies, oil consumption in 1990 remained unchanged, at 37.5 million barrels per day, as compared with 1989. A decline of 300,000 barrels per day in North America was offset by an increase of 200,000 barrels per day

Table V.2. World oil demand[a], 1986-1991

(Million barrels per day)

| | 1986 | 1987 | 1988 | 1989 | 1990 | 1991[b] | 1990-1986 (quantity) | Change (percentage) |
|---|---|---|---|---|---|---|---|---|
| Developed market economies | 35.4 | 36.0 | 37.2 | 37.5 | 37.5 | 37.5 | 2.1 | 5.9 |
| North America | 18.0 | 18.5 | 19.2 | 19.2 | 18.9 | 18.6 | 0.9 | 5.0 |
| Western Europe | 12.2 | 12.3 | 12.5 | 12.5 | 12.6 | 12.9 | 0.4 | 3.3 |
| Pacific | 5.2 | 5.2 | 5.5 | 5.8 | 6.0 | 6.0 | 0.8 | 15.4 |
| Eastern Europe and the USSR | 11.0 | 11.1 | 11.0 | 10.8 | 10.3 | 9.8 | -0.7 | -6.4 |
| USSR[c] | 9.0 | 9.0 | 8.9 | 8.8 | 8.4 | 8.0 | -0.6 | -6.7 |
| Eastern Europe | 2.0 | 2.1 | 2.1 | 2.0 | 1.9 | 1.8 | -0.1 | -5.0 |
| Developing countries | 15.2 | 15.8 | 16.5 | 17.5 | 18.0 | 18.6 | 2.8 | 18.4 |
| Africa | 1.8 | 1.9 | 1.9 | 2.0 | 2.1 | 2.1 | 0.3 | 16.7 |
| Asia | 3.8 | 4.0 | 4.5 | 4.9 | 5.3 | 5.7 | 1.5 | 39.5 |
| China[c] | 2.0 | 2.1 | 2.2 | 2.4 | 2.3 | 2.4 | 0.3 | 15.0 |
| Latin America | 4.7 | 4.8 | 4.9 | 5.1 | 5.1 | 5.1 | 0.4 | 8.5 |
| Middle East | 2.9 | 3.0 | 3.0 | 3.1 | 3.2 | 3.3 | 0.3 | 10.3 |
| World total[d] | 61.6 | 62.9 | 64.7 | 65.7 | 65.7 | 65.8 | 4.1 | 6.7 |

*Source:* UN/DIESA, based on International Energy Agency, *Monthly Oil Market Report*, April 1991.

[a] Includes deliveries from refineries/primary stocks, marine bunkers, refinery fuel and non-conventional oils.

[b] Estimate.

[c] Based on estimates of apparent domestic demand derived from official production figures and quarterly trade data.

[d] totals may not add up because of rounding.

in the Pacific and 100,000 barrels per day in Western Europe. The overall stagnation of consumption in 1990 was mainly a reflection of large declines in the fourth quarter, when demand fell sharply by 1.8 million barrels per day, as compared to the level in the fourth quarter of 1989. This drop in demand may be attributed to the recession in the United States in the second half of 1990 and reduced economic growth elsewhere, conservation, fuel switching, warmer weather and consumer destocking.

Between 1980 and 1985, oil consumption in the developed market economies fell by 10.9 per cent owing to improvements in energy efficiency and substitution away from oil, mainly for electricity generation and industry. Low oil prices since 1986, combined with stronger economic growth, have had the opposite effect. Oil consumption rose by 2.1 million barrels per day, or 5.9 per cent. The increase was particularly pronounced in the Pacific region, where oil consumption rose by 0.8 million barrels per day, or 15.4 per cent. Elsewhere, consumption increased by 0.9 million barrels per day, or 5.0 per cent in North America and 0.4 million barrels per day, or 3.3 per cent in Western Europe.

In the developing countries, the rise in oil consumption was significantly faster than in the developed market economies. Over the period 1986-1990, developing countries' demand for oil rose by 2.8 million barrels per day, or 18.4 per cent, reflecting faster population growth, rapid urbanization and increasing industrialization. The increase in oil consumption of the developing countries was mostly accounted for by the rapidly industrializing countries of South-East Asia. The surge in Asian demand was most striking in the Republic of Korea, Malaysia, Singapore, Taiwan Province of China and Thailand, where oil consumption hit double-digit growth rates. In contrast, demand for oil in many less developed countries as well as in the oil-exporting developing countries grew at lower rates.

In 1990, the growth in oil demand in developing countries is estimated to have slowed only moderately, to 2.9 per cent, despite higher prices and lower economic growth. This suggests that oil consumption in these countries is not very responsive to price changes, as possibilities of fast substitution of oil by other forms of energy are more limited than in industrialized countries. In a large number of developing countries, there is hardly any other viable alternative to oil because of the high capital requirements for investment in alternative sources of energy.

In Eastern Europe and the Soviet Union, oil consumption in 1990 is estimated to have fallen to 10.3 million barrels per day following four years of stagnation. This decline can be attributed to several factors, including lower oil production in the Soviet Union, higher oil prices, shortage of supplies and the economic disarray in the region. Oil consumption in the Soviet Union is estimated at 8.4 million barrels per day in 1990, as compared to 8.8 million barrels per day in 1989.

The shortfall in oil supplies in Eastern Europe became apparent even before the Iraqi invasion of Kuwait, following the reduction of subsidized exports from the Soviet Union. To compensate for the shortfall of imports from Iraq and the Soviet Union, all Eastern European countries turned to the spot market or entered into barter agreements. Nevertheless, volumes, particularly of petroleum products, remained in short supply, causing Bulgaria and Czechoslovakia to introduce gasoline rationing.

### Destruction of oil facilities and shifts in production

No comprehensive survey is as yet available on the destruction of oil facilities in either Iraq or Kuwait. All estimates, however, agree that the destruction is much more severe in Kuwait where more than 500 wells are burning, with a loss of oil at a minimum of 1.5 mbd and a high of 6.0 mbd (see box V.1). Perhaps the magnitude of this disaster may be appreciated if it is recalled that about 100 developing countries of Africa, Asia and Latin America import just over 4.0 million barrels per day. Suppressing the oil fires may take one year or more. Rehabilitation and reconstruction of the entire oil industry will take much longer and tens of billions of dollars.

Despite the Gulf crisis and the loss of access to about 4.3 million barrels per day from Iraq and Kuwait, world crude oil production in 1990 rose to 60.3 million barrels per day, almost 1 million barrels per day more than in 1989 and the highest level since the record year of 1979 (see table V.3).

Table V.3. World crude oil production

(Million barrels per day)

| | 1970 | 1980 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1990-1985 (volume) | Change (percentage) |
|---|---|---|---|---|---|---|---|---|---|---|
| Developed market economies | 11.24 | 12.60 | 14.36 | 14.25 | 14.20 | 14.12 | 13.50 | 13.27 | -1.09 | -7.6 |
| Eastern Europe and the USSR | 7.42 | 12.40 | 12.24 | 12.62 | 12.79 | 12.81 | 12.54 | 11.74 | -0.50 | -4.1 |
| Developing countries | 26.84 | 34.58 | 26.60 | 29.12 | 28.76 | 31.47 | 33.35 | 35.30 | 8.70 | 32.7 |
| OPEC member countries | 23.31 | 26.80 | 16.08 | 18.39 | 17.59 | 20.02 | 21.71 | 23.22 | 7.14 | 44.4 |
| Other oil-exporting countries | 2.66 | 6.68 | 8.59 | 8.77 | 9.25 | 9.51 | 9.70 | 9.99 | 1.40 | 16.3 |
| Oil-importing countries | 0.87 | 1.10 | 1.93 | 1.96 | 1.92 | 1.94 | 1.94 | 2.09 | 0.16 | 8.3 |
| World total | 45.50 | 59.58 | 53.20 | 55.99 | 55.75 | 58.4 | 59.39 | 60.31 | 7.11 | 13.4 |

*Source:* UN/DIESA, based on *Energy Statistic Yearbook*, various issues; and *Oil and Gas Journal*, 25 December 1989 and 31 December 1990.

### Box V.I. Kuwait: oil fires and the environment[a]

The first reports of oil facilities ablaze in Kuwait came in late January as fire was set to oil installations in the Wafrah oil field. Subsequent news reports suggested that just prior to the ground war, about 150 wells were ignited. This was followed by reports that between 500 and 600 wells had been set afire.

The deliberate torching of the oilfields represents Kuwait's most pressing environmental problem of today, beside which all else pales into insignificance. There has never been anything like it in history. The burning of the oilfields and the environmental effects of the burning are a direct consequence of Iraq's occupation of Kuwait.

The exact number of oil wells burning is not known officially but it is estimated that it may have been about 700 at its maximum. Some have started to cone and go out and others are now being put out by fire-fighters. The coning of a burning oil well occurs when oil is burned off faster than replacement oil can move in from surrounding oil strata. This allows the less viscous water in the strata below to move into the rock below the well intake and to be drawn up the pipe. The water-oil mixture does not burn properly so the flame goes out. A coned well cannot be restarted and the well has to be redrilled to below the point of water intake. This phenomenon means that the oil discharge pattern is changing as the number of oil wells on fire gradually decreases, while the number of wells gushing unburnt oil increases. This in turn results in the release of more oil onto the land.

Estimates of the amount of oil burned each day vary but are commonly thought to be between 2 million and 6 million barrels per day.

Few atmospheric composition measurements of any sort have been made in Kuwait. A United States Environment Protection Agency team measured hydrogen sulphide and sulphur dioxide levels during the week of 11 March at Rawdatayn, Maqwa, Al Ahmadi and Greater Burgan oilfields. All gave low levels of both gases. If sulphur dioxide levels continue to be low, acid rain is unlikely to become a problem. Initial measurements of total hydrocarbons in the air suggest that levels of these substances are high. As yet, it is not possible to give information on individual hydrocarbon species. There are also no analyses yet of emitted particulate composition, especially in relation to heavy metals such as nickel and vanadium, which are present in Kuwait crude oil.

Medical opinion in Kuwait is that, at the moment, there is not a serious environmental problem from the well emissions. In view of the little real information available, however, caution is advised until there has been an airborne investigation of the smoke plumes and a regular, ground-based air-monitoring programme has been re-established.

Smoke layers from the Kuwait fires have been observed in Bahrain and over the Islamic Republic of Iran, depending on wind direction. Eventually, the smoke plumes will be dispersed by weather, with the particulates falling or being washed out by rain. Detailed profiling by a specially instrumented research aircraft is necessary to establish the shape of the plumes and their constituents.

Ground observations suggest that the visible elements of the emission have not gone into the upper atmosphere. This may be because the oil fires were insufficiently close to create firestorm effects, which could have carried particles into the upper atmosphere. On 24 March 1991, eight fires in the Greater Burgan field were seen to swing towards each other in what could have been the start of a firestorm, but this effect lasted only a short time. The apparent relatively large sizes of the particles may also be a limiting factor with regard to the height to which they are carried. Global climate change effects of the magnitude envisaged by some scientists are, therefore, probably unlikely.

Climatic effects will most likely be confined to the region, and more locally in Kuwait, where the sun-shield effects of the smoke clouds are more pronounced.

Particulates from fires have been deposited on both land and sea over wide areas. In the Persian Gulf, they form a surface skin, which wind and currents shape into whorls and kilometre-long strands that resemble oil slicks. The effects and consequences of these carbon deposits on the sea are not known. On land, the particles cover the ground surface and plants. In the proximity of the well fields, this is mixed with unburnt oil given off as a fine spray.

The long-term consequences of this surface deposition are not known, including its effects on groundwater quality and on the soil seed-bank. it is possible that it may help to improve the water retention capabilities of the soil.

A large number of wells continue to gush crude oil, pouring huge amounts onto the land. This outpouring of crude oil increased dramatically in the last two weeks of March 1991. As a result, there are now large lakes of crude oil.

The oil on the land will have to be taken off most areas by pumping, scooping or other means and retained in special oil-holding areas until suitable disposal can be arranged. Rehabilitation treatment of the remaining oil-soaked areas is still uncertain. Proposals under consideration include plowing or harrowing to mix the oil layer with subsurface soil and sand. It is not known how successful such measures may be and the future of these oil-soaked lands will be one of Kuwait's more obvious environmental problems arising from the occupation.

Another major problem that must be faced urgently is the measurement of sulphur dioxide, hydrogen sulphide, carbon monoxide, nitrogen oxides, ozone, carbon dioxide, specific volatile compounds such as benzene, phenols, toluene and formaldehyde, as well as particulates from gaseous and particulate emissions. Also, specific health-effect studies will be needed since the range of pollutants in the atmosphere of Kuwait could cause serious respiratory illness or have long-term carcinogenic and mutagenic effects.

[a] Excerpts from the annex to a letter dated 26 April 1991 from the Secretary-General addressed to the President of the Security Council (S/22535).

Oil production patterns during 1990 brought to the fore once again the crucial importance of production capacities in the member countries of OPEC. Since the oil price collapse of 1986, OPEC member countries have been able to expand their output from readily available production capacities in order to meet growing oil demand at a time when non-OPEC production has been in a state of stagnation caused by sizeable reduction in oil output in the United States and more recently by a significant drop in the Soviet Union.

Since 1985, OPEC oil production has risen by 7.1 million barrels per day, or 44 per cent. Consequently, the OPEC share of the market has improved to 38.5 per cent in 1990, as compared to 30.2 per cent at the beginning of the period.

During 1990, the crude oil production of OPEC averaged 23.2 million barrels per day. For the first half of 1990, OPEC crude oil quotas, which had been set at 20.5 million barrels per day for the fourth quarter of 1989, were increased to 22.086 million barrels per day in an effort to match the growing demand and support a price close to the target of $18 per barrel (see table V.4). However, persistent overproduction, mainly by Kuwait and the United Arab Emirates, eroded the newly found stability of 1989. During that period, average OPEC crude oil output was estimated at 23.6 million barrels per day, exceeding the total ceiling by 7.0 per cent (see table V.5).

Table V.4. OPEC crude oil production quotas

(Thousand barrels per day)

| Country | Mar. 1983 | Oct 1984 | Sept. 1986 | Nov. 1986 | Jan. 1987 | Jul. 1987 | Jan. 1989 | Jul. 1989 | Oct. 1989 | Jan. 1990 | Jul. 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Algeria | 725 | 663 | 663 | 669 | 635 | 667 | 695 | 733 | 770 | 827 | 827 |
| Ecuador | 200 | 183 | 183 | 221 | 210 | 221 | 230 | 242 | 254 | 273 | 273 |
| Gabon | 150 | 137 | 137 | 160 | 152 | 159 | 166 | 175 | 184 | 197 | 197 |
| Indonesia | 1 300 | 1 189 | 1 189 | 1 193 | 1 133 | 1 190 | 1 240 | 1 307 | 1 374 | 1 374 | 1 374 |
| Iran (Islamic Republic of) | 2 400 | 2 300 | 2 300 | 2 317 | 2 255 | 2 369 | 2 640 | 2 783 | 2 926 | 3 140 | 3 140 |
| Iraq | 1 200[a] | 1 200[a] | 1 200[a] | 1 466[a] | 1 466[a] | 1 540[a] | 2 640 | 2 783 | 2 926 | 3 140 | 3 140 |
| Kuwait | 1 050 | 900 | 900 | 999 | 948 | 996 | 1 037 | 1 093 | 1 149 | 1 500 | 1 500 |
| Libyan Arab Jamahiriya | 1 100 | 990 | 990 | 999 | 948 | 996 | 1 037 | 1 093 | 1 149 | 1 233 | 1 233 |
| Nigeria | 1 300 | 1 300 | 1 300 | 1 304 | 1 238 | 1 301 | 1 355 | 1 428 | 1 501 | 1 611 | 1 611 |
| Qatar | 300 | 280 | 280 | 300 | 285 | 299 | 312 | 329 | 346 | 371 | 371 |
| Saudi Arabia | 5 000 | 4 353 | 4 353 | 4 353 | 4 133 | 4 343 | 4 524 | 4 769 | 5 014 | 5 380 | 5 380 |
| United Arab Emirates | 1 100 | 950 | 950 | 950 | 902 | 948 | 988 | 1 041 | 1 095 | 1 095[a] | 1 500 |
| Venezuela | 1 675 | 1 555 | 1 555 | 1 574 | 1 495 | 1 571 | 1 636 | 1 724 | 1 812 | 1 945 | 1 945 |
| Total | 17 500 | 16 000 | 16 000 | 16 505 | 15 800 | 16 600 | 18 500 | 19 500 | 20 500 | 22 086 | 22 491 |

*Source:* UN/DIESA, based on various OPEC press releases.

[a] Nominal.

Table V.5. OPEC crude oil production and quotas

(Thousand barrels per day)

| | First seven months of 1990 | | | Last five months of 1990 | | |
|---|---|---|---|---|---|---|
| Country | Production | Quotas | Percentage deviation from quotas | Production | Quotas[a] | Percentage deviation from quotas |
| Algeria | 774 | 827 | -6.4 | 800 | 827 | -3.3 |
| Ecuador | 280 | 273 | 2.6 | 288 | 273 | 5.5 |
| Gabon | 256 | 197 | 29.9 | 294 | 197 | 49.2 |
| Indonesia | 1 256 | 1 374 | -8.6 | 1 330 | 1 374 | -3.2 |
| Iran (Islamic Republic of) | 2 961 | 3 140 | -5.7 | 3 316 | 3 140 | 5.6 |
| Iraq | 3 140 | 3 140 | 0.0 | 500 | 3 140 | -84.1 |
| Kuwait | 1 942 | 1 500 | 29.5 | 239 | 1 500 | -84.0 |
| Libyan Arab Jamahiriya | 1 321 | 1 233 | 7.1 | 1 496 | 1 233 | 21.3 |
| Nigeria | 1 766 | 1 611 | 9.6 | 1 874 | 1 611 | 16.3 |
| Qatar | 370 | 371 | 0.0 | 400 | 371 | 7.8 |
| Saudi Arabia | 5 564 | 5 380 | 3.4 | 7 563 | 5 380 | 40.6 |
| United Arab Emirates | 2 010 | 1 095 | 83.6 | 2 141 | 1 500 | 42.7 |
| Venezuela | 1 993 | 1 945 | 2.5 | 2 240 | 1 945 | 15.2 |
| **Total** | 23 633 | 22 086 | 7.0 | 22 481 | 22 491 | 0.0 |

*Source*: UN/DIESA.

[a] Quotas were set at the OPEC Conference in July 1990.

At the OPEC Conference in July 1990, Kuwait and the United Arab Emirates agreed to trim their production, and a compromise was reached to lift the reference price to $21 a barrel. Quotas remained the same for all countries, except for an increase of 0.405 million barrels per day in the case of the United Arab Emirates, raising the total to 22.491 million barrels per day.

The situation changed dramatically following the invasion of Kuwait by Iraq and the subsequent United Nations embargo, which cut off exports from both countries. With the embargo in place, OPEC production dropped to 19.6 million barrels per day in August. During that month, there was great uncertainty both with regard to the magnitude of available production capacities in OPEC countries and to their willingness to make up for the loss of exports from Iraq and Kuwait. By the end of August, however, production quotas were suspended and OPEC output rebounded to 22.7 million barrels per day in September and October. By the end of 1990, OPEC output had reached approximately 23.9 million barrels per day, or about 1.4 million barrels per day over the suspended quotas. As shown in table A.39, the largest increases occurred in Saudi Arabia, the United Arab Emirates and Venezuela.

Saudi Arabia, with an average production of 5.4 million barrels per day just before the invasion, increased output by over 50 per cent, to 8.3 million barrels per day, by December 1990. Saudi Arabia's sharp rise of production once again demonstrated its flexibility and capacity to raise output quickly and significantly. The effort involved reactivating shut-in wells, mothballed pumping stations and other equipment. Both the United Arab Emirates and Venezuela raised their output by 350,000 barrels per day, to 2.35 million barrels per day each. The Islamic Republic of Iran boosted its production by over 400,000 barrels per day in September, to 3.45 million barrels per day, but by the end of the fourth quarter of 1990 had difficulties in finding a market for its relatively heavy crude. Output from other members of OPEC, including the Libyan Arab Jamahiriya and Nigeria, also increased by a total of nearly 500,000 barrels per day.

This increase by OPEC allayed fears of an oil supply shortfall in the winter. However, it prompted new concerns of a surplus in 1991 and, at a meeting in Vienna on 13 December 1990, all OPEC members, including Iraq and Kuwait, agreed to restore their output ceiling of 22.491 million barrels per day once the crisis was over.

### Stagnation in non-OPEC supplies

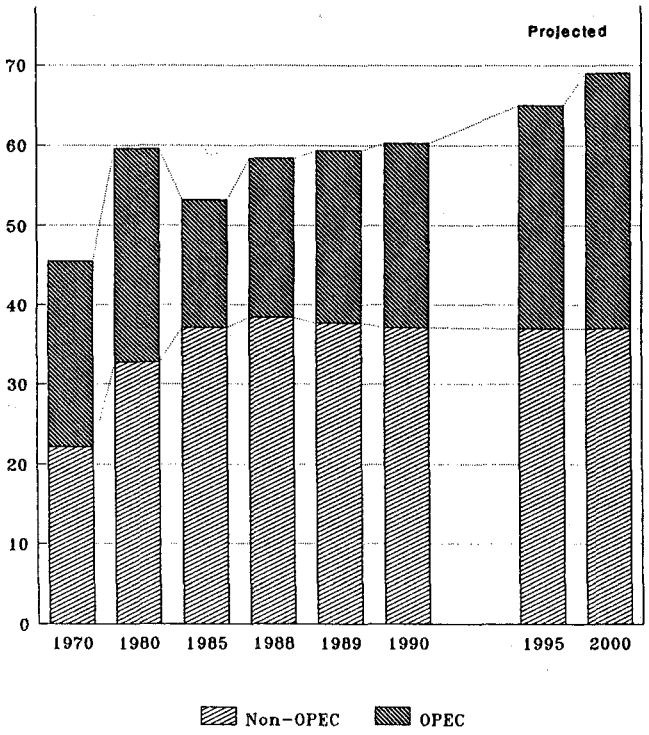
The substantial increases in production from non-OPEC countries during the 1970s and the 1980s were the result of significant oil discoveries in Alaska, China, Mexico, the North Sea and the Soviet Union. The price increases of 1973/74 and 1979/80 accelerated the development of those discoveries and resulted in new discoveries in a large number of other countries as well. Between 1973 and 1985, total non-OPEC production increased by an annual average rate of more than a million barrels per day.

Since 1985, however, non-OPEC production has remained almost stagnant owing to the lack of major new discoveries and the gradual depletion of ageing major oil fields (see figure V.2). The moderate growth in supplies from the non-OPEC developing countries has compensated for the decline in production in the developed market economies and the Soviet Union.

In the non-OPEC oil-exporting developing countries, total output has continued to rise, albeit at a slower rate than during the 1970s and early 1980s. Growth has come mainly from the expansion of capacities and development of a large number of new discoveries in several countries including, Angola, Colombia, Egypt, Malaysia, Oman, the Syrian Arab Republic and Yemen. Although production from Mexico and China, the largest producers in this group, has remained almost flat, total production has increased by 1.4 million barrels per day, or 16.3 per cent since 1985.

Figure V.2. World crude oil production

(Million barrels per day)




*Source:* UN/DIESA

In 1990, total supplies from non-OPEC oil-exporting developing countries rose by 3.0 per cent to 10 million barrels per day. China and Mexico managed only a fractional gain to 2.76 and 2.63 million barrels per day, respectively. With no new discoveries of significance being brought on stream in recent years, output from those two countries depends on older fields. Upstream work in Mexico has been slow for the past five years owing to lower oil prices and lack of investment funds for the development of proved oil reserves. Increased efforts will be required in order to avoid lower output in the future. In China, however, domestic investment, particularly in the enhancement and devel-

opment of existing fields, may increase output moderately for the next several years.

Production from other less mature areas increased rather significantly in 1990. Output from Angola reached 480,000 barrels per day, up 5.6 per cent compared with 1989. In Colombia, despite some slow-down caused by the guerrilla activity, production increased by 9.9 per cent to 445,000 barrels per day. Malaysia's 605,000 barrels per day average represented an 8.5 per cent increase. The Syrian Arab Republic continued its steady production gains with a 28 per cent increase, to 385,000 barrels per day. Sizeable to moderate increases were also posted by the Congo (up 7.3 per cent), Egypt (2.2 per cent) Oman (5.7 per cent), Peru (2.3 per cent) and Zaire (1.8 per cent). Output from new exporters, such as Viet Nam and Yemen, was also boosted significantly. Elsewhere, in Bahrain, Bolivia, Brunei Darussalam, Cameroon, Trinidad and Tobago and Tunisia, production declined.

In the oil-importing developing countries, the rapid increase in oil production in the first half of the 1980s decelerated significantly in the second half, mainly because of slow-downs in Brazil and India. From 1985 to 1989, oil production in this group increased by 4.1 per cent, compared to 75 per cent between 1980 and 1985. In 1990, total production rose by another 4.0 per cent to 2.09 million barrels per day. Only 22 of more than 100 oil-importing developing countries have some domestic production. The rest depend entirely on imports to meet their oil requirements. With few exploration and development projects under way and with their very limited proved reserves being gradually depleted, prospects in these countries are not promising.[5]

After several years of significant growth, production in the developed market economies began a downward trend in 1985. Since then, total crude oil output has declined from 14.4 to 13.3 million barrels per day in 1990. The production decline has been particularly noticeable in the United States, where crude oil output fell by 1.6 million barrels per day during the same period (see table V.6).

Table V.6. United States petroleum industry indicators, 1980-1990

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|
| Proved reserves (billion barrels) | 26.40 | 29.79 | 29.79 | 27.30 | 27.30 | 28.00 | 25.86 | 26.18 |
| Crude oil production (million barrels per day) | 8.60 | 8.57 | 8.65 | 8.69 | 8.88 | 8.97 | 7.68 | 7.22 |
| Reserves/production ratio (years) | 8.41 | 9.52 | 9.43 | 8.61 | 8.42 | 8.55 | 9.22 | 10.07 |
| Natural gas liquids and other supply[a] (million barrels per day) | 1.62 | 1.66 | 1.60 | 1.61 | 1.68 | 1.67 | 1.61 | 1.60 |
| Oil consumption (million barrels per day) | 17.06 | 16.06 | 15.30 | 15.23 | 15.73 | 15.73 | 17.23 | 17.04 |
| Net crude oil and petroleum products imports[b] | 6.37 | 5.40 | 4.30 | 4.31 | 4.72 | 4.29 | 7.19 | 7.15 |
| Net imports as percentage of oil consumption | 37.30 | 33.60 | 28.10 | 28.30 | 30.00 | 27.30 | 41.70 | 42.00 |
| Completion of exploration and development wells | 69.486 | 89.234 | 83.889 | 75.738 | 84.983 | 70.806 | 30.697 | na |

*Source*: UN/DIESA, based on United States Department of Energy, Energy Information Administration, *Monthly Energy Review*, various issues; *Oil and Gas Journal*, various issues.

[a] Includes alcohol and other hydrocarbons.

[b] Net imports equal imports minus exports.

Over 96 per cent of the group's production in 1990 was accounted for by the five major producing countries (Australia, Canada, Norway, the United Kingdom and the United States).

In 1990, crude oil production in the United States averaged 7.22 million barrels per day, or a decline of 5.9 per cent, as compared to 1989. Decreases in both the lower 48 States and Alaska contributed to the decline. However, higher oil prices in the second half of 1990, the reactivation of enhanced oil recovery projects and the application of new technologies such as horizontal drilling cushioned the decline somewhat, with output, particularly in Alaska, rising towards the fourth quarter of the year.

Between 1985 and 1989, while domestic output was declining, United States oil demand was increasing and an ever-widening supply/demand gap could only be met by additional imports of crude oil and petroleum products. As a result, imports increased from 4.3 to 7.2 million barrels per day during that period and were expected to increase further in 1990. However, because of lower economic growth and higher oil prices, demand for oil declined by about 5 per cent in the last five months of 1990. Similarly, net imports went down by nearly 1.5 million barrels per day during the same period owing in part to a drawdown of commercial stocks.

[5] Report of the Secretary-General on energy exploration and development trends in developing countries (A/45/274 - E/1990/73 and Corr.1).

To mitigate the growing dependence on oil imports, a new National Energy Strategy, proposed by the United States Department of Energy, aims at a lower rate of growth of oil demand and an increase in domestic oil production. The Strategy calls for opening part of the Alaskan Arctic National Wildlife Refuge and certain offshore areas to exploration and development. In the meantime, additional oil discoveries and more intensive use of horizontal drilling and enhanced oil recovery in older reservoirs may be expected to slow down the rate of decline of domestic oil production.

Crude oil production in Canada fell by 5 per cent to 1.5 million barrels per day in 1990. New policies aimed at a reduction in government financial support of exploration and development of conventional oil as well as tar sand projects may result in lower oil production in that country. Under these circumstances, only substantial increases in oil prices could reverse this trend through exploitation of reserves already discovered in high-cost frontier areas.

The decline in crude production in North America was moderately offset in 1990 by higher output in Australia and the North Sea. Following a fairly stable trend since 1985, crude oil output in Australia increased sharply in 1990 as production from new fields was brought on stream. Output reached 582,000 barrels per day, an increase of 19 per cent.

In the United Kingdom, output rose for the first time in five years, when it reached 1.82 million barrels per day in 1990, an increase of 4.9 per cent. Much of the increase came from fields producing close to capacity, including the re-start of production from platforms following the Piper Alpha disaster in July 1988. However, an intensive programme for field maintenance and installation of safety devices in all platforms disrupted output, particularly in the summer. Major additional increases are unlikely, but as production from new smaller fields comes on stream, the previously anticipated decline may be arrested or even reversed over the next few years. One recent estimate by the United Kingdom Government suggested that output in 1991 would not exceed that of 1990.[6]

Norway continued to post further production gains, increasing its flow by 7.1 per cent in 1990 to an average 1.57 million barrels per day. With some of the large fields in their early phase of production and with other fields now being developed, production seems set for further growth.

One of the most important developments in world oil production in 1990 was the confirmation of a drastic decline in output in the Soviet Union. Serious problems in that country include declining well productivity, a decrease in volume of drilling, outdated equipment, shortages of material and technical supplies, a harsh working environment and a decaying pipeline system.

Soviet oil production peaked at 12.48 million barrels per day in 1987, accounting for nearly 20 per cent of world-wide oil production. It remained relatively stable in 1988, but fell by 310,000 barrels per day in 1989 and by another 650,000 barrels per day in 1990. The level of production for the final quarter of 1990 averaged about 10.9 million barrels per day, the lowest in over a decade. Meanwhile, exports of crude and petroleum products, the single most important export item and source of foreign exchange in the Soviet Union, dropped to less than 3.7 million barrels per day in 1989 from a record high of 4.1 million barrels per day in 1988.[7] Exports in 1990 are estimated to have fallen to less than 3.5 million barrels per day. By January 1991, the President of the Soviet Union warned that oil exports could be cut further by as much as 50 per cent.[8]

At the same time, major leaders of the oil industry and economic organizations of the Tyumen region in western Siberia, the largest oil-producing province in the Soviet Union, warned in an appeal to the President that if production continued to fall at the current rate, the country could become a net oil importer by 1995.[9] In response to that appeal, the Government approved special regulations and agreed on emergency measures to provide 25 billion rubles of extra investment, with a view to arresting further declines in production.[10]

Investments by international oil companies in the Soviet Union, although increasing, have not met previous expectations because of continuing political, administrative, legal and fiscal uncertainties. Under these circumstances, future arrangements may have an impact on production levels, at best later in this decade, when output could be maintained or even increased in the longer term. However, in the short term, the outlook for the reversal of the decline is not promising.

Crude oil production from Romania, the only significant oil producer in Eastern Europe, also decreased considerably to about 160,000 barrels per day in 1990 from an estimated 180,000 barrels per day in 1989. Romanian output has been on the decline ever since it peaked at 294,000 barrels per day in 1976.

### Changing structure of the oil industry

Following an era of a stable oil market effectively dominated by seven transnational oil corporations, a new structure began to emerge during the 1960s and the 1970s. This change came about with the entry of a significant number of private sector independent oil companies, several public sector national oil companies and the emergence of OPEC.

Previously, the transnational oil corporations exercised a remarkable degree of control through their integration of all stages of the upstream and downstream operations of the oil industry, from exploration and production to refining and marketing. Subsequent to a wave of nationalizations, especially in the member countries of OPEC during the 1970s, the integration of the private sector companies was eroded, with national oil companies taking over much of the crude oil production and supply (see table V.7).

[6] *Oil and Gas Journal*, 31 December 1990, p. 42.

[7] "Soviet industry uses squelch high oil price bonanza", *Oil and Gas Journal*, 27 August 1990, p. 27.

[8] *The Wall Street Journal*, 22 March 1991.

[9] Financial Times, 29 January 1991.

[10] *Ibid.*, 21 February 1991.

Table V.7. The world's top oil-producing companies, 1989

| Company | Country | Upstream operations (Thousand barrels per day) | Rank | Downstream operations (Thousand barrels per day) | Rank |
|---|---|---|---|---|---|
| Saudi Aramco | Saudi Arabia | 5 337 | 1 | 1 620 | 8 |
| Pemex | Mexico | 2 894 | 2 | 1 679 | 7 |
| NIOC | Iran (Islamic Republic of) | 2 870 | 3 | 766 | 14 |
| INOC | Iraq | 2 786 | 4 | 550 | 28 |
| PDV | Venezuela | 1 985 | 5 | 1 894 | 5 |
| Royal Dutch/Shell | Netherlands/United Kingdom | 1 852 | 6 | 4 102 | 2 |
| Exxon | United States | 1 804 | 7 | 4 121 | 1 |
| British Petroleum | United Kingdom | 1 412 | 8 | 1 848 | 6 |
| KPC | Kuwait | 1 411 | 9 | 852 | 13 |
| Sonatrach | Algeria | 1 221 | 10 | 475 | 35 |
| NNPC | Nigeria | 1 191 | 11 | 401 | 38 |
| Adnoc | United Arab Emirates | 1 029 | 12 | 162 | 57 |
| Chevron | United States | 949 | 13 | 2 185 | 3 |
| Pertamina | Indonesia | 885 | 14 | 751 | 15 |
| Libyan NOC | Libyan Arab Jamahiriya | 842 | 15 | 407 | 37 |

*Source*: UN/DIESA, based on "PIW ranks the world's top oil companies", *Petroleum Intelligence Weekly*, special supplement issue, 7 January 1991.

Until the end of the 1960s, lower oil prices had fueled demand for oil and displaced coal as the premier source of commercial energy. During that period, world oil consumption had grown at a rate of 7 per cent per annum, so that by 1973, oil accounted for nearly half of the world commercial primary energy requirements. Nearly 56 per cent of that oil was supplied by OPEC.

Throughout the second half of the 1970s and the first half of the 1980s, higher oil prices inhibited oil demand growth significantly and led to a pronounced shift of investments in exploration and development to non-OPEC areas. As a result, 10 million barrels per day of crude oil were added to non-OPEC supplies and 12 million barrels per day of OPEC oil was displaced from world oil markets. Furthermore, slow economic growth, coupled with an enhancement of energy conservation measures and the substitution of oil in favour of coal and nuclear power led to a reduction of approximately 7 million barrels per day in oil demand in the developed market economies.

The emergence of non-OPEC oil producers as leading players in the oil market and the transformation of OPEC as the residual supplier became apparent particularly after the round of price increases in 1979/80. OPEC output was eroded rapidly up to 1985, with a cumulative drop of a remarkable 50 per cent, while all the non-OPEC countries were producing at maximum capacity.

This led to the collapse of oil prices in 1986 and the introduction of a new policy aimed at increasing market share. Private as well as public sector oil companies suffered major financial setbacks, with consequent bankruptcies, take-overs and consolidations throughout the oil industry.[11] Investments in exploration and development, as well as in enhanced oil recovery projects, declined precipitously. Similarly, the operation of a number of marginal fields and low-productivity wells was rendered uneconomic.

The marked growth in the world economy in the second half of the 1980s and the subsequent rise in oil consumption, combined with the slow-down in non-OPEC production, resulted in a significant recovery in the demand for OPEC oil. More recently, the gap between the sustainable production capacity of OPEC and demand for its oil has been narrowing rapidly, thus prompting increasing concern about serious supply/demand imbalances during the 1990s.

As the recent cycle of structural changes in the oil industry evolves in the 1990s, oil market stability will depend on the availability of adequate production capacities. This was clearly illustrated during the Persian Gulf crisis when the availability of the OPEC spare capacity and the willingness of the main producers to increase production proved crucial in cushioning oil market instability, especially since major consuming countries procrastinated in the release of their strategic oil reserves. Had it not been for the extra 3 to 4 million barrels per day made available by OPEC, the oil market would have experienced much more severe instability, with serious consequences to the world economy. During the next few years, much will depend on the reconstruction and restoration of oil production in Iraq and Kuwait, as well as on the implementation of plans aimed at expanding capacities in other OPEC countries with adequate proved reserves.

With non-OPEC production remaining flat or even declining while demand for OPEC oil may increase on an annual basis by 1 to 1.5 million barrels per day, the gap between production and availability of capacity may close completely. In view of these circumstances, the promotion of market stability and energy security will require the expansion of production capacities sooner rather than later. This will entail the allocation of investments that may very well exceed the financial capability of oil-producing countries and will require, in any case, access to the modern technologies and management that are mostly associated with international oil companies.

As far as the magnitude of proved oil reserves is concerned, the ability of OPEC countries to raise their production capacity in order to meet the bulk of future world oil requirements is

[11] *World Economic Survey 1989*( United Nations publication, Sales No. E.89.II.C.1 and corrigendum), p. 99.

not in doubt (see table V.8). During the past decade, while depletion has outpaced reserve additions in both the developed market economies and the Soviet Union, nearly 340 billion barrels of oil have been added to the OPEC proved reserves, which are now estimated at 774 billion barrels. Their share of the world total has improved from 68 to 78 per cent during the same period. Yet, OPEC still accounts for only 38 per cent of the world oil production, while the remaining 62 per cent is accounted for by the non-OPEC countries with only 22 per cent of global oil reserves. Consequently, the reserves-to-production ratio of non-OPEC countries currently stands at 17 years, while that of OPEC is over 92 years.

Table V.8. World proved oil reserves, end 1979 - end 1990

| | End 1979 | | End 1990 | |
|---|---|---|---|---|
| | Millions of barrels | Percentage of world | Millions of barrels | Percentage of world |
| Developed market economies | 58 796 | 9.2 | 47 623 | 4.8 |
| Eastern Europe and the USSR | 70 000 | 10.9 | 58 615 | 5.9 |
| Developing countries | 512 545 | 79.9 | 891 868 | 89.4 |
| OPEC member countries | 435 611 | 67.9 | 773 819 | 77.5 |
| Other oil-exporting countries | 69 930 | 10.9 | 102 951 | 10.3 |
| Oil-importing countries | 7 004 | 1.1 | 15 098 | 1.5 |
| World total[a] | 641 341 | 100.0 | 998 106 | 100.0 |

*Source*: UN/DIESA, based on *Oil and Gas Journal*, 24 December 1979 and 31 December 1990.

[a] Totals may not add up because of rounding.

The countries of the Persian Gulf remain the principal holders of oil reserves. By 1990, these countries accounted for 657 billion barrels of proved oil reserves, or 66 per cent of the world total. This dominant position is further reinforced by their low production costs, which are currently estimated at less than $4 per barrel.[12] Therefore, increasing oil demand need not be inhibited either by the adequacy of reserves or by production costs for many years to come.

While OPEC members have often expressed their willingness to boost production capacity, major imponderables remain. Repeated calls for dialogue and cooperation from OPEC and its Secretary-General, as well as from top oil industry officials, in order to address this issue have received only lukewarm support. Such cooperation is essential in order to complement market forces with the aim of providing security of supply to consumers and security of demand to producers so that investments can be mobilized and made on time to meet higher demand levels.

Prior to the Gulf crisis, the production capacity of OPEC was estimated at a level close to 27 million barrels per day. But with the damage inflicted on the Iraqi and Kuwaiti oil production facilities, the overall maximum capacity of OPEC has been lowered considerably and had to be fully utilized.

According to one recent estimate, the call on OPEC oil may reach 28 million barrels per day by 1995 and 32 million barrels per day by the year 2000. Even with the restoration of production from Iraq and Kuwait, the need for a safety margin of spare capacity would require an expansion of about 6 million barrels per day by 1995. For this, the Secretary-General of OPEC has estimated investment requirements at $60 billion. Another study made by the Center for Global Energy Studies has estimated that an expansion of the production capacity in the Gulf region by a net of 5 million barrels per day would need an investment of $70 billion, of which $20 billion would be needed for new capacity and $50 billion in order to maintain current capacity levels.[13]

With prospects for further additions to non-OPEC supplies uncertain and with world oil demand expected to grow increasingly dependent on OPEC oil, a number of capacity expansion programmes have been announced by several OPEC countries. In Saudi Arabia, a long-term expansion project was initiated in 1989, when plans were approved to raise sustainable capacity to 10 million barrels per day by the mid- to late 1990s. But with the eruption of the Persian Gulf crisis, it has been reported that Saudi Arabia's national oil company, Saudi Aramco, is accelerating its development programme to reach its target within the next few years. The plans involve some $15 billion to $30 billion of investments and cover a complete overhaul of oil fields and production facilities, including the application of new technologies to extract more oil from its producing fields, reactivating shut-in wells and drilling new ones. In 1990, United Sstates engineering companies were awarded key design and management contracts to begin work on this programme but progress has been interrupted by the Gulf crisis.

Similar but less ambitious expansion programmes have been announced by the Islamic Republic of Iran, Nigeria and Venezuela. After a period of decline which saw production capacity fall from 6 million barrels per day in the late 1970s to approximately 3.3 million barrels per day in 1990, the Islamic Republic of Iran has announced plans to increase capacity to 5 million barrels per day by 1996.[14]

Production capacity in Nigeria has also declined in the past decade, falling from 2.4 million barrels per day in 1981 to 1.8 million barrels per day in 1988. But it has been recovering since the Nigerian National Petroleum Corporation, in cooperation with private sector oil companies, started a programme aimed at raising the sustainable capacity to 2.5 million barrels per day by

[12] Jean Favre and Francois Bellat, *Technologies and Cost cutting in the Hydrocarbon Industry*, report prepared by the French Petroleum Institute, 1990.

[13] "CGES study estimates $70 bn investment requirements for 5 mn b/d net increase in Gulf production capacity", *Middle East Economic Survey*, 18 February 1991, p. 45.

[14] *PM Energy Report* (New York, 6 March 1991) Pegasus Petro-analytical Service.

1995. The Government has also requested these companies to raise proved reserves from the current 17 billion barrels to 20 billion barrels during the same period.[15]

All major oil companies operating in Nigeria have announced new investments in joint ventures with the national oil company of that country. For example, the Shell Petroleum Development Corporation of Nigeria has already raised expenditure for 1991 by 30 per cent, to $1.3 billion, and is planning to invest $1.5 billion a year from 1992 to 1996. Currently, there are seven large foreign oil companies operating in different fields in Nigeria and more may be expected to bid for new operations, particularly in offshore areas. One problem faced, however, is the ability of the Nigerian Petroleum Corporation to fund its interest in this investment programme since it is required by law to participate with a 60 per cent share in all joint ventures with foreign oil companies. To overcome this financial difficulty, Nigeria had previously divested 20 per cent of its equity in a venture involving about half of the country's oil production and 11.8 billion barrels of proved reserves for a consideration of $2 billion.[16]

Venezuela, another key producer of OPEC, is also considering a significant increase in output. In January 1990, Petroleos de Venezuela announced that plans were approved to increase capacity to 3.3 million barrels per day by 1996, at a cost of $12 billion.[17] A political debate has been focusing on new oil policies regarding the reinvolvement of foreign oil companies in oil exploration and production, and since the nationalization in 1976, Venezuela has reached agreement on a joint venture with Shell and Mitsubishi in the development of major offshore natural gas for export.

Other OPEC members (e.g., Algeria, Ecuador, Gabon and Indonesia) are also pursuing plans in order, at least, to maintain their production levels in cooperation with international oil companies. However, in view of their relatively smaller reserves, prospects for considerable additional output are limited.

Among non-OPEC oil-exporting developing countries, financial constraints have been particularly difficult in Mexico, where Pemex, the national oil company, has been unable to expand production from offshore proved reserves. Increasing domestic oil consumption is impeding efforts to preserve oil export volumes of some 1.3 million barrels per day. Maintaining these export volumes will require the investment of $2 billion to $3 billion a year.[18] For this purpose, special arrangements were made in late 1990 with the United States, under which loan guarantees will be provided for $5.6 billion during the next five years for petroleum equipment and services to Pemex.

A number of oil-importing developing countries have also embarked on expansion programmes. India has initiated a plan to boost oil production capacity by over 40 per cent to almost 1 million barrels per day by 1995 at a cost of $6 billion. Similarly, Brazil intends to raise output to 1 million barrels per day by 1995 from an estimated 0.65 million barrels per day in 1990.

### Medium-term outlook and policy implication

On the assumption that economic activity will expand at 2 to 3 per cent per annum, world oil demand is expected to grow at an average annual rate of about 2 per cent during the 1990s. Annual growth rates of oil consumption are expected to range between 1 to 2 per cent in the developed market economies and 3 to 4 per cent in the rest of the world. At these growth rates, an additional 1 million barrels per day per annum will be required. This implies some 6 million barrels per day more by 1995 and another 4 to 5 million barrels per day by the year 2000.

This scenario assumes that oil prices will remain at moderate levels and that efficiency gains and substitution of oil by other sources of energy will not be influenced greatly by deliberate government intervention for environmental or other reasons.

However, demand for OPEC oil will possibly reach 27 to 28 million barrels per day by 1995 and 30 to 32 million barrels per day by the year 2000. This can result in a gradual tightening of the oil market and may lead to another energy crisis within the next few years unless substantial new capacities are developed. While programmes to expand production capacities in some OPEC member countries have been initiated, their implementation may be inhibited by a variety of factors, including political instability, which may be further accentuated among the oil-producing countries themselves because of different perceptions with regard to equitable production patterns, limited financial resources and inadequate access to the necessary technologies and other inputs that would require cooperation with the oil-consuming countries and the transnational oil corporations.

The crisis in the Persian Gulf has not only caused unprecedented destruction of oil facilities, but it has also delayed urgently needed investments for incremental production capacities. The crisis has also led to new calls for national and regional protectionism of energy markets in Europe and the Americas, which may cause further delays of such investments. Under these circumstances, the promotion of international cooperation in energy, particularly in oil, through a producer-consumer dialogue is more important than ever.

[15] "Ambitious targets set for Nigerian oil expansion", *Financial Times*, 19 February 1991.

[16] *Platts Oilgram News*, 5 October 1990, p. 3.

[17] *The New York Times*, 11 February 1991.

[18] "Can Mexico prime the oil pump without foreign capital?" *The Wall Street Journal*, 19 October 1990.

In spite of the everyday use of phrases like "energy production" and "energy consumption", energy cannot be produced or consumed in any ultimate physical sense. It can, however, be converted from one form to another, e.g., from heat to electricity and from chemical energy to mechanical energy. Such conversion inevitably entails an irretrievable cost in terms of energy available to mankind. For example, when coal is burned, chemical energy is converted into heat and thereby made available to perform man's work. After burning, the energy remaining in the smoke and ash residue is so dissipated as to be largely beyond the use of man; it is bound, unavailable, not useful. The totality of energy originally associated with the lump of coal is not diminished by burning, it is conserved. However, the mix of available and unavailable energy within that totality is shifted radically as chemical energy is converted to heat. Physicists have given the name "entropy" to the measure of bound energy contained in a closed physical system (be the latter a single lump of coal or the entire universe).

Studies on heat engines performed in the early nineteenth century led to the conclusion that the free heat energy of such an engine inevitably degenerates into bound energy. Extension of the principle beyond heat to other energy forms (electricity etc.) gave rise to the second law of thermodynamics (or "entropy law"), which states that the entropy (the amount of bound energy) of every closed physical system continuously increases over time.

Since the rate of growth of entropy is related positively to the rate of energy conversion from one form to another, and since energy conversions occur incessantly in nature, entropy would rise even if mankind did not exist. Nevertheless, all human activity involves energy conversion, hence, some contribution to the accumulation of bound and, therefore, no longer useful energy. Most important here, of course, are activities associated with the economic process, since the latter is the focus of such a large part of human effort. In the economic process, i.e., in the course of "adding value" to the natural gifts of the earth, available energy is changed to unavailable. The high entropic products of the economic process manifest themselves as "waste" of various sorts: the particulate pollution that fouls the air of modern cities, the mounds of solid, often toxic, debris that disfigure the land, and the poisonous discharges into the seas that destroy marine life.

To say then that energy conversion and environmental degradation are "related" is to seriously understate the matter. They are, indeed, the same phenomenon viewed from different points of view. The chain of causation is simple: economic progress necessitates energy conversion; energy conversion increases entropy or environmental degradation.

## The energy sector and the environment

Energy conversions associated with what is usually called energy production and consumption, i.e., those conversions associated with the "energy sector" specifically, are among the worst offenders in terms of their impact on the environment, on local, regional and global scales.

### Local problems

The deep involvement of the energy sector in the generation of the principal forms of localized environmental pollution is well documented. Fossil fuel use accounts for the bulk of most forms of air pollution, from about 63 per cent of particulates to nearly 100 per cent of sulphur oxide emissions.[19] These fuels are also implicated in water pollution, mainly through thermal effects. The conversion of heat to electricity in oil or coal-fired generating stations or in nuclear power plants accounts for over 70 per cent of such thermal pollution in some situations.[20] Fossil fuels are also involved in the creation of solid wastes. The worst offender here is coal mining by strip methods. The mounds of refuse created contribute to air pollution in the form of particulates and to water pollution, as minerals are leached out by rains. Nuclear power presents unique environmental concerns, in part because of radioactive waste materials, some of which remain hazardous for centuries. Nor are renewable energy forms completely innocent of deleterious localized environmental effects. As expressed in one comprehensive study:

"In general, renewable energy resources are often considered to be environmentally benign by comparison with most 'conventional' energy sources like fossil fuels, which are not renewable. They are not, however, always entirely free from environmental impacts. In a sense, the impacts of the renewables may spring from the opposite qualities to those of the fossil fuels. Whereas fossil fuels are concentrated energy stores, whose rapid consumption releases into the biosphere large quantities of previously trapped elements, renewables tap more dilute energy flows which are generally of a physical rather than a chemical nature (i.e. wind, solar radiation, hot or flowing water) and therefore tend to have a physical rather than a chemical impact on the environment, e.g., noise, visual intrusion, ecosphere disruption etc. If they are to replace significant amounts of fossil fuel or nuclear capacity, renewables may require relatively larger land takes and materials inputs and their dispersed operation may sometimes pose new problems of monitoring and control."[21]

There are other manifestations of the relationship between energy and the environment that are quintessentially international. In these cases, if one country takes action that exacerbates the situation within its own borders, it worsens the difficulty for other countries as well; on the other hand, if one country attempts to mitigate its own problem, it is doomed to failure unless other nationals also adopt appropriate corrective measures.

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[19] United Nations Environment Programme, *The Environmental Impacts of Production and Use of Energy*, Energy Report Series (Nairobi, August 1980), part III, "Renewable sources of energy", p. 86.

[20] *Ibid.*, p. 65.

[21] *Environmental Impacts of Renewable Energy* (Paris, OECD, 1988), p. 7.

### Acid rains

One such problem is that of the so-called "acid rains". When sulphur oxides and nitrogen oxides are injected into the atmosphere as gases, they tend to form acidic sulphates and nitrates which are dissolved in atmospheric moisture and can be precipitated as rain over large areas. Clouds bearing these acids may be blown hundreds of miles from the point of origin of the oxides and are no respecters of national boundaries. Thus, industrial discharges from plants in southern Europe may fall as acid rains in Scandinavia.

Although the acid rains produced by these oxides are harmful to plant life on land, their greatest damage is to aquatic life, both plant and fish. The water from these rains accumulates in lakes and streams and can poison most life contained in them. Once a lake, for example, becomes so toxic that it will not support plant or fish life, it may take several decades for it to become life supporting again, even after the pollutants have ceased being pumped into the air. Although the atmosphere is cleared of these compounds fairly promptly, it takes much longer for the lake's ecosystem to recover. One reason is that besides being directly toxic, the acids involved dissolve heavy metals, e.g., cadmium, mercury and arsenic, present in rocks on the bottom of the lake. These metals themselves are poisonous, so that a long-lived secondary toxicity reinforces the direct effects of the acids.

Progress in resolving the international issues occasioned by acid rains has been made both on a bilateral basis and through multilateral efforts, notably in the Economic Commission for Europe.

### Global warming

While the significance of acid rains is regional, that of another environmental threat related to energy conversion, namely, a gradual rise in the temperature of the earth's surface, is truly global. It is difficult to identify another problem confronting mankind that is as broad in geographic scope, more troubling in its possible implications for the basic parameters of human life, or more dependent upon international cooperation for its solution.

As early as 1896, it was noted that, theoretically, a rise in the concentrations of certain trace gases in the atmosphere could inhibit the flow of radiation from earth into space. The gases in question - mainly carbon dioxide, methane, nitrous oxide and various halocarbons - are active absorbers of infrared radiation (energy of from 3 to 80 micrometers wave length), precisely that portion of the electromagnetic spectrum in which the earth seeks to diffuse energy into space.[22] By trapping such radiation, the gases raise the temperature of lower layers of the atmosphere, create a kind of "greenhouse effect" at the earth's surface and cause the globe to warm.

Table V.9 summarizes data pertaining to current atmospheric concentrations of these gases and their contributions to global warming. The most important gas in terms of warming effect is carbon dioxide. Its level in the atmosphere is growing at about 0.4 per cent per year, and it accounts for about one half of the incremental warming effect. The next most important gas is methane whose concentration is growing nearly twice as fast as that of carbon dioxide and whose relative warming effect per unit is 25 times greater. Two halocarbons - chlorofluorocarbons 11 and 12 (CFC 11 and CFC 12) - alone account for 14 per cent of the trace gases warming impact. Concentrations of these chemicals in the atmosphere are minute, but they are growing rapidly and have an extremely large warming impact per unit. International action on CFCs has been initiated. This has been motivated, not by their greenhouse effect, but by their deleterious action on the ozone layer.[23] Finally, nitrous oxide adds about 6 per cent of current warming, and a variety of other gases, including other CFCs, another 13 per cent.

It is important to understand that atmospheric concentrations

Table V.9. Principal greenhouse gases

| | Current atmospheric concentration (parts per million by volume) | Recent rate of increase (per cent/ year) | Warming effect compared to $CO_2$ | Current greenhouse contribution (percentage) | Atmospheric half-life (years)[a] |
|---|---|---|---|---|---|
| Carbon dioxide ($CO_2$) | 351.3 | 0.4 | 1 | 49 | 70 |
| Methane ($CH_4$) | 1.675 | 1.0 | 25 | 18 | 5 |
| Nitrous oxide ($N_2O$) | 0.31 | 0.25 | 230 | 6 | 120 |
| CFC 11 and CFC 12 | 0.000225 | 4.0 | 15,000 | 14 | 50-100 |
| Other [b] | na[c] | na[c] | na[c] | 13 | na[c] |

*Source*: United States Environmental Protection Agency, *Policy Options for Stabilizing Global Climate Change* (Washington, D.C.; 1989)

[a] The time required for the gas in the atmosphere to decay to half its initial level.

[b] Additional CFCs, halons, changes in ozone, changes in stratospheric water vapour.

[c] not available.

[22] Norman J. Rosenberg, "Climate change", *Resources* (winter, 1987), (Washington, D.C., Resources for the Future), p. 4.

[23] The degradation of the stratospheric ozone layer, which became evident in the mid-1980s led, in June 1990, to a treaty among 90 countries to phase out CFCs by the end of the century.

of the greenhouse gases cannot be quickly stabilized by simply maintaining their annual emissions at current levels. All of these gases once emitted remain in the atmosphere for decades or centuries. Should the annual emissions of these gases be immediately fixed at 1985 levels, the greenhouse effect would still be rising at the end of the next century.[24] Reductions in the yearly emissions of each of the gases of 50 to 100 per cent of its current level would be needed to stabilize its concentration during the next century.[25] Even these concentrations would be very high relative to pre-industrial revolution levels. (The one exception is methane, which, because of its relatively brief half-life, could be stabilized by a 10 to 20 per cent cut from the present emissions level.)[26]

There seems to be agreement among specialists that the atmospheric concentrations of the principal heat-trapping gases have been rising over the long term - at least since late in the last century, and have accelerated in recent years. Thus, the carbon dioxide content of the atmosphere has, apparently, risen by 25 per cent since the late nineteenth century, with 11 per cent of the rise occurring in the past 30 years.[27] It is generally believed that the rising combustion of fuels - overwhelmingly fossil fuels, but also biomass (mainly fuelwood) - has been the principal cause of the increasing carbon dioxide concentration in the atmosphere. Deforestation - and land use activities in general - are also thought to have played a major role. Atmospheric methane has roughly doubled over the past three centuries.[28] Changes in a number of sources have played a role in its increasing level in the atmosphere, including expanding fossil fuel use. The atmospheric concentration of nitrous oxide is believed to have increased by 5 to 10 per cent since the industrial revolution.[29] The generation mechanisms of this gas are not well understood, but are thought to be related to the expanded use of nitrogenous fertilizers, land clearing and combustion of fossil fuels and biomass. Chlorofluorocarbons were introduced into the atmosphere only in this century, but, as noted earlier, their concentrations have been growing rapidly.

There also seems to be broad - though not universal - agreement that the average global temperature has trended upward over the past century and a half. Data assembled by Jones, Wigley and Wright - perhaps, the most frequently cited source - "show little trend in the nineteenth century, marked warming to 1940, relatively steady conditions to the mid-1970s and a subsequent rapid warming. The warmest 3 years have all occurred in the 1980s".[30]

Finally, there also seems to be a convergence of opinion among scientists that the greenhouse effect is the most plausible explanation for the observed rise in global temperature. This view is reflected in the recent report of a working group of the Intergovernmental Panel on Climate Change, one of three working groups on climate change set up by the United Nations Environment Programme and the World Meteorological Organization in November 1985.[31]

Nevertheless, there is considerable uncertainty about the implications of any past relationship between the greenhouse gases and global temperature for future average temperatures of the earth. The principal vehicles for deducing such implications are several large-scale mathematical models, known as global circulation models. These models uniformly predict that when the greenhouse gas accumulation reaches a level twice that of pre-industrial times (between 2030 and 2050 if present trends continue), global average temperature will have risen 1.0 to 3.0 degrees Celsius from present levels; a few decades later, the rise will be 2.5 to 5.5 degrees Celsius.[32] In assessing these figures, it should be remembered that the difference in global average temperature between the peak of the last ice age and recent times was only about five degrees Celsius. Further, these projections imply a rate of warming 10 to 50 times greater than that experienced in the last century. Considerable uncertainty surrounds these models, and, therefore, the projections that they yield. It is possible to point to various specific factors that the models do not capture well, e.g., the roles of clouds and the oceans. (Unfortunately, it is not even clear in which direction inadequate representation of these factors biases the analysis, towards more or less future warming.) More fundamentally, these lacunae are merely symptomatic of the great complexity of climatic phenomena, in terms of number of relevant variables, the amount of "feedback" or interrelatedness among them and the non-linear character of the relationships involved. Such complexity has given rise to a certain pessimism among many observers about whether the uncertainty enveloping quantitative projections about global warming will ever be entirely dispersed.

Further uncertainty surrounds the economic and social consequences of some hypothetical degree of global warming, although such effects would probably be very serious, should the high end of the temperature ranges given above be realized. Agriculture appears to be the most directly sensitive sector of production to global warming. Should global temperature become extremely elevated, it is likely that the main grain-growing regions of the northern hemisphere would be adversely affected. While the agricultural productivity of areas further north would benefit from higher temperatures, it is thought that the generally poorer soils of these regions would require centuries before they could be brought to the level of productivity of current agricultural land.[33] One study has foreseen the likelihood of two major depletions of the world's grain stocks per decade, leading to the loss of 50 million to 400 million lives.[34] A rise in

[24] United States Environmental Protection Agency, *Policy Options for Stabilizing Global Climate* (Washington, D.C., February 1989), p. 15.

[25] *Ibid.*

[26] *Ibid.*

[27] *Ibid.*

[28] *Ibid.*, p. 16.

[29] *Ibid.*

[30] P. D. Jones, T. M. L. Wignley and P. B. Wright, "Global temperature variations between 1861 and 1984", *Nature*, vol. 322 (31 July 1986), pp. 430-434.

[31] See Intergovernmental Panel on Climate Change, *Climate Change. The IPCC Scientific Assessment* (Cambridge, Cambridge University Pess, 1990).

[32] Rosenberg, *op. cit.*, pp. 13-14.

the sealevel would be another major impact. As ocean waters warmed they would expand, and glaciers and polar ice caps could melt. Under extreme conditions, the seas could rise over a metre,[35] inundating huge areas of coastal plains. Most seriously affected would be developing countries, particularly in Asia, where millions of people live on river deltas and flood plains. It has been estimated that in Bangladesh alone 18 per cent of the land area could be submerged by 2050, displacing 17 million people.[36] It is likely that with extreme warming, virtually every aspect of human life would be affected, if only indirectly. Just how seriously, or by what precise mechanism, a given human activity might be influenced are matters clouded in obscurity.

As noted, these effects might result from a degree of global warming associated with the high end of the range of current projections. Lower degrees of warming would, presumably, produce less extreme effects.[37] Nevertheless, in a context in which uncertainty is rife, in which it is not possible to exclude "worst case" scenarios - indeed, not even possible to realistically place a probability on their occurrence - policy formulation must take the possibility of catastrophe actively into account. The normal human reaction to a "worst case", to which it is not possible to assign a probability, is to hedge, to "buy insurance" against its occurrence.

In the case of global warming - in which at least 50 per cent of the effect is due to energy conversion - an obvious way to hedge is by limiting those conversion activities that are most deeply implicated in the warming phenomenon. The most frequently cited target is reduction of fossil fuel use, which contributes 70 to 90 per cent of annual carbon dioxide emissions and significant amounts of methane and nitrous oxide. In view of the fact that at the present time those fuels contribute about four fifths of mankind's current energy supplies, it is clear that a policy that would seek immediate and Draconic cuts in fossil fuel use would be impractical. The goal must be to seek provision of adequate energy supplies and environmental protection concurrently.

In view of the fundamental nexus between energy conversion and environmental degradation, to a considerable extent energy policy is environmental policy, and vice versa. This identity creates a need for principles of policy design that are broad enough to encompass both energy and environmental aspects of decisions. Such principles will be explored in the next section.

## The environmental aspect of energy policy

One conclusion that flows from an effort to step back and view the energy question as a whole and in a suitably long time frame is that energy policy and environmental policy are virtually inseparable. Any attempt to plan and implement either, in vacuo, would likely lead to disastrous consequences for the other.

In the past, "energy policy" has meant an effort to plan the "energy sector", narrowly construed as the supply side, with little or no consideration of energy demand. Environmental policy - if existing at all - has meant an effort to "fix up" instances of environmental (mainly air) pollution. In both cases, the approaches taken have been narrowly engineering in character, piecemeal and with little demonstrated appreciation of how decisions taken in one field reverberate in the other. Today, however, it is widely recognized that energy demand side policy is at least as important as supply side and that both are seriously affected by - and, in turn, affect - environmental policy.

To understand how energy policy and environmental policy intertwine, it will be useful to consider how the concept of economic efficiency applies to the production and use of energy. It will then be possible to see how that idea, as applied to energy, naturally extends to incorporate environmental considerations.

### Energy efficiency and energy markets

The goal of energy policy is to ensure that energy is produced and used at rates that are economically efficient from a social point of view. That is not to say that the efficiency thrust of energy policy should never be blunted by consideration of social equity, national independence or other overriding factors, but rather that the normal, abiding aim of public policy towards energy is to enhance the economic efficiency with which it is converted at all stages.

The idea of economic efficiency applies to both energy supply and energy demand. Energy is efficiently produced, in an economic sense, if the various energy forms and fuels are produced in quantities such that the social marginal costs and benefits of each are equal. The resulting production pattern is efficient in the sense that it maximizes the value of output of the energy sector as a whole. Similarly, the energy so produced is efficiently distributed, in an economic sense, if it is allocated such that in every employment the value of its social marginal product and cost are equal. This distribution mix is efficient in the sense that it maximizes the value of energy's contribution to aggregate economic output.

The world is witnessing an expanding recourse to market mechanisms as devices for approximating, in practice, the theoretical ideal of economically efficient allocation. As is well known, markets must yield prices that are free to change in response to shifts in supply and demand and must reflect a reasonable degree of competition on both sides, if they are to retain the advantages in terms of economic efficiency claimed for them. As to energy markets, there is an obvious role for Governments to ensure that these qualities obtain in practice.

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[33] Christopher Flavin, "slowing global warming: a worldwide strategy", paper no. 91 (October 1989) (Washington, D.C., Worldwatch Institute) p. 19.

[34] Paul Ehrlich and others, "Implications for life on Earth: global change and carrying capacity", presented to the Forum on Global Change and Our Common Future, Washington, D.C., 2-3 May 1989.

[35] Christopher Flavin, *op. cit.*, p. 21.

[36] *Ibid.*

[37] Nordhaus considers the effects of a 3-degree Celsius rise in temperature by the middle of the next century in the United States. He finds a 0.25 per cent reduction in GDP in that country likely under those circumstances, but admits the likelihood of "inadequately studied or inherently unquantifiable" effects of warming; see William Nordhaus, "To slow or not to slow: the economics of the greenhouse effect", discussion paper (Cowles Foundation 1990); also, William Nordhaus, "A sketch of the economics of the greenhouse effect", *Papers and Proceedings of the 103rd Meeting of the American Economic Association*, May 1991, pp. 146-150.

Energy prices are sometimes frozen by administrative action for long periods. The usual result of such freezes is that the prices in question, even if initially balancing supply and demand, shortly fail to do so as these quantities evolve over time. Thus, Governments need to ensure that prices are flexible enough to, at least, reflect fundamental shifts in supply and demand.

Similarly, there is a role for Governments in maintaining competition on both the supply and the demand sides of energy markets. A good example of governmental promotion of competition on the supply side is provided by the Public Utility Regulatory Policies Act of 1978, which was designed in part to expand the number of independent power producers in the United States. The law required electric utilities to cooperate with independent electricity producers in two ways. First, utilities were forced to accommodate "qualifying" non-utility power producers by installing transmission lines between the latter's generating facilities and the power grid. Secondly, utilities were obliged to purchase power from independent producers at prices reflecting "avoided costs" (prices equivalent to the cost to the utility of generating the power itself or buying it from another utility). The Act did not take full effect until 1983, but since then several thousand independent producers (either small power producers or co-generators of heat and power) have qualified under the Act. Only two years later, the North American Electric Reliability Council estimated that nearly 2 per cent of power-generating capacity additions through 1995 would come from non-utility sources.[38]

### Cases of market failure

Idealized free and competitive markets seldom obtain in the real world, and even if they did, in some cases they would not yield production levels or allocations at which social benefits and costs are equal. Such cases of "market failure" most frequently arise in situations in which important and widespread benefits or costs accruing to society as a whole are external to the economic calculations of private decision makers.

In the context of energy supply, situations arise in which the production of some energy form or fuel creates a benefit to society at large which is not captured by the private producer of the energy, i.e., its value is not reflected in a higher price for the energy produced. The private energy producer has an incentive to expand production to the point at which his marginal costs rise to the level of the price received. Since the latter does not incorporate the value of the external benefit, the level of energy output will be too low from the point of view of society as a whole. An example sometimes cited is that of the small, local crude oil producer whose output is held below a social optimum by reason of the fact that the price received for oil domestically does not reflect such external values as added energy security for the country. On the other hand, there are occasions in which energy production gives rise to a cost to society that is not incurred by the private energy enterprise. In that case, output is carried beyond the socially optimal level.

External benefits and costs also create discrepancies between social and private optima in the allocation of energy, once produced. Thus, employment of a particular form of energy may create a benefit to society that is not appropriated by a private employer. The value of the marginal product of energy as seen by the private firm is less than the value viewed from a societal perspective, and actual utilization is held below its socially optimal level. Conversely, energy use may involve a cost paid by society, but not by the private employer, leading to overuse. The classic example is coal utilization for electricity generation in secondary power plants. Coal burning produces environmental effects (sulphur and nitrogen oxide emissions, particulates and carbon dioxide) that are certainly costs to society but that do not appear as expenses on the books of the power plant.

The relationship between energy conversion and environmental degradation at the policy level is now clear. Energy conversion invariably involves environmental damage (by the second, or entropy, law of thermodynamics). Such damage, although a cost to society as a whole, falls out of the profit-loss calculations of energy producers or users. The resulting market failure calls for governmental policy action to produce rates of production or employment of energy at which social costs (including environmental ones) and benefits are equal.

## Market failures and energy policy in practice

Two broad classes of measures have been employed to correct perceived instances of energy market failure: attempts to internalize external benefits and costs and governmental mandates.

### Internalization of benefits and costs

In principle, it should be possible to induce decision makers to produce or use energy at socially optimal levels by varying, through subsidies or taxes, the prices they receive as producers or the prices they pay as users. (The subsidies referred to here are those explicitly geared to influence production or allocation of energy, not those designed for other social purposes, e.g., income redistribution.) In other words, external benefits or costs are internalized to private producers or employers of energy.

Subsidies to reflect perceived external benefits to society have been far more common in practice than taxes to reflect perceived external costs. Interestingly, subsidies, as relating to the energy sector, have been geared more often toward promoting the substitution of capital for energy than spurring the production or use of energy. The often implicit premise has been that the market will underemploy capital and overemploy energy, there being an external benefit in the use of the former and an external cost in the use of the latter. The benefit is often seen as national security in terms of energy (independence of foreign energy sources), and the cost as the absence of such security (dependence on foreign sources). As a result, subsidies to investment in combined heat and power (co-generation) facilities, district heating units, refuse incineration plants, heat pumps and many other energy-efficient capital goods are often found in the industrial sector. (In member States of the IEA, these have covered between 7 and 30 per cent of investment costs in recent years.[39]) Subsidies to promote substitution of capital for the direct consumption of energy in residences have covered, in part, the cost of insulating materials and weather-stripping, and in some countries, that of heat

[38] For a full discussion, see Michael J. Dodman, "Electric utilities face increased competition", *Resources* No. 90 (winter 1988) (Washington, D.C., Resources for the Future), pp. 20-22.

pumps, control devices and double-glazed windows. (Financial incentives have run from 15 to 100 per cent of cost in IEA countries.[40]) Grants, tax incentives and low interest rate loans have all been used as subsidizing devices.

Subsidies to research, development and demonstration of energy- efficient technologies have also been utilized by Governments as a tool to spur substitution of capital for energy. Some Governments have emphasized projects aimed at achieving major advances in basic technologies; others have sought to improve existing methods. Similarly, there have been different foci of governmental support - research and development versus demonstration - depending upon the economic structure and industrial organization of the particular country.

There are few countries that systematically employ taxes to modify the production or allocation of energy. Sweden is one of them, having decided in 1983 to discourage oil use by consumers through taxation even though the world price were to fall. Similarly, in early 1986, when oil prices were declining sharply, Denmark raised energy taxes and Portugal phased out subsidies on some oil products, both actions being motivated by considerations of long-term efficiency. For most countries, most of the time, energy taxes are set on the basis of government revenue requirements or macroeconomic considerations rather than on the basis of the economic efficiency of energy markets.

The most important potential area of application within the environmental field of the internalization principle will be to global warming. The greenhouse gases released during fossil fuel use are costs to society as a whole, but external to the calculations of individual users, whether private or governmental. Fossil fuels are produced and employed at rates exceeding social optima, and public policy is needed to reduce both. The policy means most frequently mentioned to achieve this end is internalization of the external costs of fossil fuels through imposition of a tax on the carbon content of the fuels employed, a so-called "carbon tax". Efforts have been made to estimate the magnitude of the carbon tax required to achieve various reductions of future annual carbon dioxide emissions from fossil fuel burning (i.e., reductions relative to levels of emissions that would exist in the absence of any abatement measures).[41] It seems clear that the time paths of carbon taxes required in different regions will be so disparate that the economic efficiency of attainment of a given global emissions reduction target could be greatly enhanced by institution of a system for trading emissions permits among areas.

### Governmental mandates

Governmental mandates in the energy field include both regulations governing the energy use behaviour of firms and individuals, and standards imposing minimal levels of energy conversion efficiency on durable goods, both producer and consumer. Both governmental regulations and standards seem to be rationalized on the same grounds as internalizing subsidies and taxes. There is a social benefit to employing capital and a social cost to employing energy. These are external to the decisions of individual employers of productive services. Therefore, capital is underemployed, and energy overemployed. Mandates are then an attempt to set the actual rates of utilization of these services equal to their socially optimal rates by law.

Regulations in the industrial sector have taken a great many specific forms, varying with the mix and organization of industries in different countries. Energy use plans, covering up to five years in advance, are mandatory in some countries. A number of Governments require the energy use impact of major industrial capital projects to be spelled out in advance. Some have set maximum temperature levels in industrial plants, and a few require automatic controls on heating systems. In the residential sector, regulations have been applied mainly to apartment buildings. Here, rules pertaining to mandatory maintenance work, restrictions on air-conditioning use, and individual metering of heat and electrical power consumption have been imposed in various countries. The transportation sector has seen the application of mandatory regular car inspections for fuel efficiency in a few countries (Austria, Germany and the Netherlands) and vehicular speed limits (to reduce gasoline or diesel fuel usage) in many more.

Standards are minimal levels of energy conversion efficiency for durable goods, which have been set by Governments. In terms of the short-term impact on energy intensity, automotive fuel efficiency standards are the most powerful of this class of measures. Because of the relatively quick turnover of the automobile stock, improvements in the fuel efficiency of new cars can have a significant effect on the average fuel efficiency of the entire automotive stock in only a few years. Only the United States has a mandatory programme for automobile manufacturers, but a number of countries have established targets for the fuel efficiency of new cars. Standards for conversion efficiency in new structures, both residential and commercial, have also been established. These influence the design and manufacture of heating systems by prescribing the use of certain materials and techniques or by simply mandating minimal levels of thermal efficiency in such systems. Finally, a few countries have imposed minimal efficiency standards on certain appliances.

Governmental mandates in the energy field have usually been rationalized on the basis of an appeal to an alleged external benefit of capital relative to energy which runs in terms of national security. However, such substitutions of capital for energy have also been justified on the basis of external environmental costs. Thus, regulations pertaining to the lead content of gasoline, introduced in the United States two decades ago, are becoming increasingly common. Standards regarding pollutant emission levels for new large industrial plants and secondary electricity-generating facilities either are already in effect or are planned in many countries, and standards imposed retroactively on existing facilities are in force in, perhaps, a dozen. Similarly, emissions of nitrous and sulphur oxides from new vehicles are being progressively tightened in many countries. The norms on vehicular fuel efficiency discussed above, although frequently jus-

[39] *Energy Conservation in IEA Countries* (Paris, OECD, 1987), p. 132.

[40] *Ibid.*, p. 133.

[41] A wide variety of estimated carbon taxes and associated abatement costs have been developed. These vary with assumptions concerning emission baseline data, reduction targets, GDP and population growth rates, rates of technological change, relative prices, technical possibility of substitution, and the climatic and economic models employed.

tified on energy security grounds, have a powerful impact on mitigating environmental costs in the form of air pollution as well.

**Other tools of policy**

Market failures involving external environmental costs have called into existence new approaches to the remediation of such costs.

One approach involves the application of the familiar economic principles of "specialization in production" and "gains from trade" to the environmental problem. The approach has been used in connection with externalities in the form of air pollution. It works as follows. A governmental authority sets a limit on the aggregate emission of a specific air pollutant in a particular area during a particular period. Mandatory limits on the emissions of enterprises known to be producing the pollutant are also established, with these individual limits (not necessarily equal) aggregating to the set total. Permits to emit up to the individual limits are distributed to the firms. Inevitably, the cost of reducing emissions will vary among firms. A firm with a relatively high cost of remediation will find it profitable to pay a firm with a relatively low cost to go beyond the latter's own mandatory clean-up level to a level equal to the mandatory levels of both the low-cost and the high-cost firms. A low-cost firm will be willing to take on this additional work because it can sell its own emission permit to the high-cost firm. (The price will fall between the clean-up cost of the low- cost firm and that of the high-cost firm.) Both high-cost and low-cost firms benefit from the voluntary exchange, and the cost to society of achieving a set reduction in the emissions of the pollutant is minimized. It should be emphasized that the scheme works only if trading in permits is allowed. This technique for minimizing costs of pollution reduction was embodied in the United States Clean Air Act of 1970. Experience to date has been sufficiently favourable that the technique was given considerable prominence in the revision of the Act, which was passed by Congress in 1990.

Another technique involves the use of liability insurance against possible claims arising from environmental damage. Insurance companies accept liability for such claims in exchange for a premium. Such schemes are in various stages of development in Finland, Germany and the Netherlands.

# Chapter VI

## IMPLICATIONS OF THE TRANSFORMATIONS IN EASTERN EUROPE AND THE SOVIET UNION FOR ECONOMIC RELATIONS AMONG EAST, WEST AND SOUTH

This chapter consists of two sections. Section A deals with the changes that have been taking place, mainly in Eastern Europe[1] and the Soviet Union, but also in the other countries of the East, especially Albania and Yugoslavia,[2] and what changes they entail in the structure of traditional East-West relations. It also discusses the policy aspects of these changes in terms of the potential consequences of the transitions in the East and in East-West relations for the world economy in general and the developing countries in particular. Section B of the chapter is devoted to a select inventory and interpretation of quantitative information about the past interrelations of Eastern Europe and the Soviet Union in the world economy before the major changes of late 1989 began to crystallize. This forms one basic input into the more policy-oriented discussion of section A.

### A. Policy aspects of changes in the East-West environment

The following section addresses the core policy issues of ongoing reforms in the East and their repercussions for the East-West environment, the trade and finance of the reforming countries, and the impacts on the world economy in general and the developing countries in particular. It first examines the present status of reform and the near-term outlook for establishing buoyant market economies in Eastern Europe. Next, it clarifies the traditional economic interdependence of the group with the rest of the world economy of which the majority of empirical details are in section B. The most important elements of Western assistance to the East are discussed, followed by a summary of the critical aspects of the starting conditions for society-wide reforms in the East. Finally, the potential implications of the "revolutions" in the East for international trade, finance and global policy coordination are examined.

#### Unfulfilled expectations in the East and opportunities for change

In early 1990, considerable optimism prevailed regarding the eventual effects of the major political changes, and societal transitions that had just been inaugurated in Eastern Europe and the Soviet Union. The impact of these changes on economic affairs was judged to be beneficial for all concerned. Positive results were expected to materialize through increased trade and financial flows, and other forms of intensified international economic relations. This was to take the shape of full accession to, or more active participation in, the international economic regimes already in place, as well as in various regional activities, particularly European integration. There would also be favourable implications for international relations that are less formally structured, including disarmament efforts, collaboration in combating pollution and communicable diseases and development assistance.

The assessment did not ignore the downside risks that were bound to occur, arising from profound problems of transition. At the start of 1990, the outlook for short-term economic growth in the East was not encouraging. But few commentators felt that the anticipated temporary set-backs would be as severe as they have been. Most were optimistic about medium to long-term development prospects of the countries in transition. Creating open markets in the East was also seen as eventually constituting a new "growth pole" for the world economy. It was felt that the marketization and democratization of Eastern Europe and Yugoslavia would unleash sources of economic growth in these countries, with palpable repercussions for the global economy. Furthermore, the political transitions in the East signalled the end of the Cold War. This in itself augured well, inasmuch as funds that would have been earmarked for defence would now become increasingly available for more productive capital investments. At the same time, a favourable climate for market-orientation in these countries, supported by multilateral and bilateral finance, would unleash significant private initiative to mobilize the sizeable capital funds from transnational corporations and other investors, including portfolio holders, required for the reconstruction of the Eastern economies.

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[1] The designation "Eastern Europe" is used here chiefly for presentational convenience to group together the smaller countries of Europe that used to be centrally planned. The core of the group consists of Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland and Romania. The German Democratic Republic must be included because, until German unification on 3 October 1990, it blended nearly completely into the *problématique* of Eastern Europe. Of course, in considering reforms after 3 October 1990 and the future of Eastern Europe, it no longer belongs in that group.

[2] Although Albania (more recently) and Yugoslavia (from the very beginning) have formed part and parcel of the ongoing transformations in Europe, they are omitted from most of the empirical analyses in section B, but not from the policy framework of section A. Traditionally, Yugoslavia has not been included in the categories "Eastern Europe" or "European planned economies", it having abandoned planning in the 1950s and having acquired developing-country status in a number of international organizations. Albania is omitted from most computations simply because the pertinent empirical information is not available or at least not in a format that ensures a modicum of comparability with the sources utilized for this chapter. The notion "East" is used purely as an expositional shorthand that designates Albania, Eastern Europe, the Soviet Union and Yugoslavia combined.

Some concerns were voiced about the impact of the changes in the East and of the West-to-East assistance being marshalled. Protracted restructuring would probably involve a sizeable decline of output and incomes in the East that could not but affect existing international linkages. In the short to medium run, the ongoing societal rebuilding efforts of the East would narrow the scope for development assistance from East to South in all of its forms; it would in the short run reduce import demand, certainly the component of trade with developing countries that previously had been justified on other than economic grounds; and it would raise the degree of competition faced by developing countries, especially in Western European markets. Economic reconstruction in the East was also expected to shrink the opportunities for developing countries to compete for market shares there. Those that had traditionally maintained intimate ties with the East would almost certainly lose, as economic rationality would cut out transactions previously justified on other than economic grounds. Furthermore, the transition would elicit a demand for capital goods and technology that many developing countries could not hope to compete for with any degree of success.

Similar concerns related to the expected negative aspects of Western assistance to the East, possibly including the Soviet Union. It was widely feared that the East would obtain preferential access to Western markets, especially in the European Community and perhaps also the European Free Trade Association (EFTA). Furthermore, the volumes of official financial assistance being earmarked by Western countries to assist the transition were perceived potentially to encroach upon development assistance otherwise meant for developing countries.

This fear extended to the commitment of the official multilateral institutions, in the first instance the World Bank and the International Monetary Fund, to help the reforming countries finance their transition. Without a further infusion of funds, these institutions would necessarily have to operate with a fixed pool of loanable assets and thus find themselves unable to allocate the desired level of resources to developing countries. Also fears were expressed regarding the financing of national Governments. Without raising budgets appropriated from the public purse for development assistance and recognizing the considerable reluctance on the part of the electorate in developed countries to raise fiscal revenues, any sizeable commitment to the reforming countries could not but divert resources from developing countries.

Furthermore, the attractiveness of the East for portfolio and foreign direct investment was deemed to jeopardize the flow of private finance into developing countries, chiefly through the activities of the transnational corporations. Also fears were raised that the unprecedented western assistance might complicate the developing countries' access to technology. Finally, it was felt that any facilities extended to accommodate labour migration into the West, especially Western Europe, would threaten the livelihood of migrant workers and the flow of remittances, a vital source of foreign-exchange earnings, especially for the countries of North Africa and the Middle East, but also Yugoslavia.

Not many of the promises of reform and few of the fears were corroborated in the course of 1990. Some are unlikely to materialize any time soon, if at all, owing to the nature of the ongoing transitions in the East. Others may yet come to the forefront of the political debate, given the uncertainty and substantial fluctuations in the time path of sociopolitical and economic reforms toward eventual recovery that can be expected in the reforming countries. In some, uncertainties at this juncture are considerable.

There is now a widely shared pessimism about formulating and implementing credible[3] economic reforms in the East. This arises in part because of the realization that earlier expectations had been based on erroneous assumptions of the nature and magnitude of transition and, even more, of its negative implications in the short run. It also stems from unexpected developments in the area undergoing reforms, as well as untoward events in the international economy that could not have been foreseen at the time, as discussed mainly in chapter II. To this must be added pessimism based on the worsening short-term economic outlook of these countries, as detailed in chapter II, and untoward domestic and foreign developments. The abrupt collapse of the Council for Mutual Economic Assistance[4] (CMEA)[5] and its associated transferable-rouble trade and payment regimes, as well as the expected slow-down in the buoyancy of global economic activity as a whole for the near term, is exacerbating this pessimism.

Furthermore, the rationale for some fears, such as the diversion of foreign direct investment, except in the rather short run, and, in that context, the shrinking access to western technology because of West-to-East assistance, was not well founded. Also erroneous was the assertion, or assumption, that with the political decision to base economic decisions henceforth on market criteria and open up the reforming countries, economic stability would be quickly regained. That assumption was helpful in the political transition of these new democracies, but not in drawing up and implementing feasible programmes for steady transition that could validate the much-needed relative stability.

Perhaps most important has been the very nature of the evolving reform process itself. The evolution of the transition during 1990 and so far in 1991 suggests that market-oriented reform in a pluralistic setting in the East is a complex phenomenon. The sequence of problems faced in each country also differs in major respects for various reasons. One is that the starting conditions in the former planned economies are different. This is certainly the case with respect to the external debt, competitiveness in world markets, the monetary overhang, inflationary pressures, the degree of political and social consensus on reform and

[3] Reforms are credible when they are irreversible and they succeed in managing their adverse domestic and external repercussions by holding adjustment costs to the acceptable social consensus.

[4] The CMEA will be formally dissolved later in 1991 or by default. For all practical purposes, however, it no longer operates.

[5] This comprised ten full active members (Eastern Europe and the Soviet Union as defined, and Cuba, Mongolia and Viet Nam); one inactive full member (Albania), one associate member (Yugoslavia), nine cooperants (Finland and eight developing countries - Afghanistan, Angola, Ethiopia, Iraq, Mexico, Mozambique, Nicaragua and the Democratic People's Republic of Yemen - now again Yemen) and a number of *ad hoc* observers (other socialist countries, developing countries and representatives from international organizations). In what follows, the focus will be on the active full members and the developing-country cooperants.

many other key determinants of success. Furthermore, the basics of the economic construct at which policy makers may be aiming, here for simplicity's sake identified as "the market economy", in reality is far from uniform. Finally, in efforts to assist the countries in transition, the various agencies and national Governments of the West and South that have pledged financial, technical and other support have, in essence, followed a country-by-country approach.

As regards prospects, the current domestic and external payments situation of most countries of the East (see chapter IV) suggests a protracted period of austerity with either sharp downward adjustments in or stagnating levels of sustainable absorption as well as output. This owes a good deal to the inability of these countries to divert their trade to Western markets without incurring sizeable terms-of-trade and/or export-revenue losses. At present, few policy makers in the area appear to be willing even to entertain the merits of regional economic cooperation, including the formation of a customs or other type of economic union and the introduction of some payments facility to bridge the vacuum left by the disappearance of the trade and payments facilities that were anchored to the transferable rouble. Instead, most hope that Western assistance will be forthcoming to offset deteriorating current accounts. Inasmuch as this need for financial assistance is unlikely to be met so as to permit trade volumes that could buttress economic activity at fairly high levels, there may be a sharp cut-back in aggregate demand in the group. This could debilitate the reform movement and socio-economic stability in the area. In the process, the beneficial effects of Eastern reforms for other partners and global economic management that had earlier been anticipated would fail to materialize. In fact, the outcome might be the obverse - a drag on the world economy rather than a stimulus.

This brief backdrop to developments since early 1990 and to what can reasonably be expected for the near term suggests that implications of the transitions in the East depend critically on the time horizon and sustainability of the reforms. On present expectations, neither the optimism with which reforms were regarded in early 1990 nor the worst expectations of adverse effects thereof on the world economy, particularly on developing countries, are likely soon to be validated, if at all. The following outcomes are rather more likely.

In the short to medium run, given the precarious state of economic and political affairs in the East, the worsening economic recession there is likely to reduce demand and incomes. This is bound to affect adversely imports and the potential for these countries to provide official development assistance (ODA) and foreign direct investment, however meagre, notably to developing countries that have traditionally maintained close ties to the East. It may also increase pressures for migration into Western Europe. On present commitments to the East, the potential for diversion of funds earmarked for developing countries in Western markets is minimal. So is that of competing in Western markets.

But the situation in the East continues to be extraordinarily complex. Severe economic and political disarray may yet set off unexpected consequences for stability in the world economy. A pronounced deterioriation in the East's socio-economic situation might set in train an out-migration that could be staved off only through much larger international economic assistance, particularly in the European context. Such an event might divert funds otherwise committed to development assistance. It can only be hoped that the situation in the area can be stabilized through concerted international action.

Even under much more favourable circumstances, the consequences of a credibly managed transition in the East are likely to be different from most expectations in early 1990. In fact, the principal effect may be through increased competition in western markets, because of the East obtaining discriminatory preferences especially in Western European trade (but not labour) markets. The impacts in terms of diversion of ODA funds from the official multilateral institutions, portfolio and foreign direct investment, or technology transfers, on the other hand, are likely to be muted, if sizeable at all. However, if the situation in the East were precipitously to worsen, such as in the case of the eastern part of Germany, Western Europe especially would have no choice but to augment its aid to the East. With relative stagnation in major economies forecast for the near term and reluctance on the part of the electorate in major donor countries to fund larger budgets, that might call for diverting financial support to the East. This is the short-term prospect.

If and when reforms jell, their impact on the world economy may be considerably positive, given the opportunities for trade creation and competition through normal market access, for bolstering factor productivity growth in the East, for managing the global economy and for forging greater cooperation in Europe. Because at some point it will be attractive for private foreign capital to move into the East, a temporary diversion of capital resources from other countries may be entailed, but only in the short run. Inasmuch as the developing countries have not benefited from sizeable capital inflows during the past decade and the present outlook is not positive, such a diversion would not necessarily mean a further denial of capital to developing countries. Attractive investments are likely to find financing without excessive delays.

Perhaps the most hopeful consequence of the reforms in the East and of the remarkable changes in East-West relations is twofold. It should offer opportunities to improve the coordination of international economic and other assistance to the East. With some additional efforts, it might also provide sufficient impetus to attune such assistance better to the requirements of the economies in transition than has been the case thus far. More effective international assistance can speed up the reform processes in the East and shorten the lag for generating the expected gains for partner countries, including developing countries. Better coordination of more effective assistance than achieved thus far would also benefit the reform processes themselves. Concurrently, increased availability and greater transparency of information should measurably facilitate the international monitoring process, especially the identification of new economic opportunities.

How the external aspects of the crystallizing reform strategies can be expected to evolve can only be discussed against the backdrop of an examination of the traditional economic links that the East has maintained with the rest of the world. These links have been reflected through trade, service flows, capital movements, labour mobility and development assistance. They are difficult to quantify because the available information is inadequate (see section B). It should be recognized, however, that past patterns of international interlinkages are inadequate guides to the present determinants of the prospective international economic relations of the countries in transition. The fundamental reason is that the thrust of these countries' policies for the future is meant to be radically different from that in the past. Indeed, the reforming countries are jettisoning key features of the planned environment, especially as concerns the primacy of intragroup relations, the shielding of domestic economies against international competition and the preservation of a considerable degree of policy-making autonomy, including through tailored trade and payments arrangements anchored to the transferable rouble. Also, these countries hope to mesh themselves much more intimately with the world economy in general and the European integration movements in particular.

In other words, the relevance of past linkages to the present reform path and what the Eastern countries eventually hope to accomplish depends on the nature of the transition, the key aspirations of these countries with respect to their involvement in the global economy, and the concrete trade and payment regimes to be emplaced as the reform gathers momentum. In this connection, two hypotheses may be usefully entertained. One is that the more distorted the past external linkages of the reforming countries, as measured in terms of real economic scarcities, and the more rapid and more profound the transition to market-based decision-making in the reforming countries, the larger is bound to be the impact of the East's transformations for the rest of the world economy.

These repercussions will manifest themselves directly through structural changes in trade and finance. Such transformations cannot but exert pressures in existing markets as the reforming countries attempt to capitalize on their prevailing and emerging real comparative advantages. The implications of the East's changing environment are also bound to come to the fore more indirectly, as a result of the reforming countries desiring a different immersion into the international economy than was possible under the earlier division of the global system into two world economic systems[6] that allegedly could function quite separately from each other. The East is now unlikely to confine its involvement to joining the existing economic regimes and their custodial institutions. They can be expected to be bent on playing a more active, assertive and constructive role in any debates on managing the global economy. These shifts are bound to be accompanied by the reforming countries' gradually merging themselves in integrational arrangements that by their nature are discriminatory. If only for that reason, it behooves the international community to explore ways in which the degree of discrimination that will now be superimposed upon the global system will be kept to a minimum and managed in such a way as to contain, and where possible remedy, adverse repercussions on the more vulnerable parts of the world economy.

Although the past reality differs radically from what is now emerging, the trade and payment links built up during the past four decades or so have implications for the initial stages of the particular reform path, including its speed, comprehensiveness and sequencing, that the countries can pursue in isolation or in their groupwide context. They also may offer hints as to economic relations that prospectively may be lost or drastically reconstructed with all attendant consequences for partners. Because the data compilations upon which analysis can be based are woefully inadequate, assessment of these relatively short-term impacts is complicated. This is even so for merchandise trade, given the obfuscation of available data and the lack of cooperation that the East traditionally accorded international efforts to ensure greater comparability in statistics over time and across countries. Because of the serious problems with the data, all details of the information utilized here for highlighting the policy aspects are assembled in section B of the present chapter.

### Merchandise-trade links

First, in contrast to developments until the late 1970s, there is some doubt that Eastern Europe and the Soviet Union even marginally intensified their involvement in international trade during the 1980s. At best, there was a weak increase in Eastern Europe's export and the Soviet Union's import intensities. The only exception was for Polish exports, owing to the extraordinary adjustment policies pursued in the early 1980s. Moreover, most countries made a major effort to bolster intragroup trade, particularly during the first half of the 1980s. Furthermore, there was a substantial contraction in real exports to market economies in the second half of the 1980s (on average, -2.3 per cent over the period 1986-1989 for the combined group). Exactly the reverse prevailed for real imports from developing countries in the late 1980s, suggesting that the environment for development assistance from the East during the 1980s became less buoyant than it had been earlier.

Second, as regards the geographical distribution of trade of Eastern Europe and the Soviet Union three features are worth noting. One is that intragroup trade during the 1980s hovered around half of overall trade when data are converted at official exchange rates, and around one third when converted at more meaningful cross-rates between the transferable rouble and the dollar. Furthermore, there was a tendency for that share to rise by the mid-1980s basically because of adverse terms-of-trade effects, notably for total exports of the Soviet Union and total imports of Eastern Europe. A declining share (from about one third to one fifth) of both exports and imports of both Eastern Europe and the Soviet Union is a feature of the 1980s for developed market economies. Likewise for developing countries,

[6] The "socialist" system consisted of the East, as defined, plus China, the Democratic People's Republic of Korea and the Lao People's Democratic Republic (the latter since the late 1970s, but only according to some definitions). The rest enveloped the "capitalist" world economic system.

their share remained at about one sixth of exports but only about one tenth of imports (all measured at official exchange rates), although there were considerable fluctuations during the period.

Third, for a variety of reasons, the commodity composition of trade of Eastern Europe and the Soviet Union with various groups of countries was more asymmetric than can normally be anticipated for countries that engage in more or less open trading. At least their export pattern will tend to be similar, and the disparities in import patterns will be determined largely by their differing resource endowments. For Eastern Europe and the Soviet Union, the asymmetry stemmed from the systemic separation of intragroup trade from commerce with other partner groupings. In other words, the transferable-rouble trade and payment regimes, especially the intragroup pricing rules adopted in that context, were major determinants of the composition and distribution of trade of the CMEA countries.

Overall exports and imports of these economies were dominated by finished manufactured goods (especially in Eastern Europe's exports) and fuels, raw materials and semi-manufactured products (especially in the Soviet Union's exports). Trade in agricultural products and durable consumer goods occupied a comparatively small share (20-30 per cent for exports and 25-30 per cent) of overall imports. Especially the share of manufactured consumer goods remained low (about one tenth of exports and imports).

When various partner groups are compared, a similar asymmetry is noticeable. Thus, in the pattern of both intragroup trade and exports to developing countries machinery and agricultural products dominated, although not to the same extent. But the asymmetry between CMEA trade and trade with developed market economies was very substantial. The vast bulk of exports to the latter group consisted of fuels, industrial raw materials and foodstuffs. The share of finished manufactures in that trade amounted to roughly one fifth, as compared to around one half in intragroup trade and over a third in exports to developing countries. As concerns imports, there was broad similarity chiefly in the composition of intragroup trade and imports from developed market economies, particularly the importance of machinery and fuels and industrial raw materials. Manufactures imported from within the group took up one half of the total, in contrast to around one third to two fifths for developed market economies.

Fourth, the data on the regional composition of trade with developing countries are very inadequate. If used without proper care, they may lead to highly misleading conclusions, as demonstrated in section B below. However, the information supports the propositions that trade between the East and the developing countries has always been marginal, rather unstable, heavily concentrated on a few partners and dominated by quite traditional forms of exchange, overwhelmingly manufactures exported by the planned economies in exchange for foodstuffs, fuels and industrial raw materials. These features suggest that it might be useful, especially in assessing the impacts of the changes due to the transition in the East, to look at analytically more meaningful groupings of developing countries.

Fifth, in section B, four such groups are examined: the three full developing-country members of CMEA,[7] the eight developing countries with some cooperant status in CMEA,[8] a group of developing countries that have traditionally maintained close ties with Eastern Europe and the Soviet Union,[9] and a select group of newly industrializing economies (NIEs) not elsewhere included.[10]

Although the shares of any of these groupings in the trade of either the Soviet Union or Eastern Europe have remained small, it should be stressed that especially the three CMEA members have occupied a noticeable, and growing, position especially in Soviet trade. Also, the cooperants appear to have been able to increase their market share. But this was not so for the other two groups, whose shares fluctuated considerably (declining in Soviet trade but slightly rising in Eastern Europe's). On the other hand, the selected NIEs never accounted for more than 1-2 per cent of the trade of either Eastern Europe or the Soviet Union. Second, the first three groups have all been able to run sizeable imbalances, although the rate of increase in the 1980s slowed down markedly and for some groups in fact there was little growth in nominal terms.

It is important to observe that, although the participation rates of these countries in Eastern Europe and the Soviet Union remained small, that trade was critical for the developing countries that maintained close relations with the East. This was particularly the case for the three CMEA members and all but a few of the cooperants at least half of whose trade is accounted for by Eastern Europe and the Soviet Union.

### Financial interactions

In- and outflows of funds can usefully be grouped under commercial borrowing, foreign direct investment and development assistance. Estimates of borrowing in financial markets by Eastern Europe (omitting the German Democratic Republic) and the Soviet Union suggest that gross debt rose from virtually nil in 1970 to about $153 billion in 1990; the corresponding net debt magnitudes (gross minus foreign deposits) are almost nil to $129 billion. Especially during the global financial crisis of the 1980s, all substantial borrowers in Eastern Europe (Hungary, Poland and Romania) as well as Yugoslavia encountered severe external-payments constraints. Several had to declare a formal moratorium on debt-servicing or were forced into formal debt-rescheduling in 1982. Many of these indebted countries continue to combat the after-effects of substantial borrowing on policy flexibility.

From the early 1970s on, the countries of Eastern Europe and also Yugoslavia tried to attract foreign capital through various joint ventures laws; the Soviet Union did so in 1987 and Albania only in early 1991. Yet, comparatively small amounts of capital came into the East prior to recent reform announcements,

[7] Mongolia became a full CMEA member in 1962, Cuba in 1972 and Viet Nam in 1978.

[8] The relevant agreements were signed between 1973 and 1987, but special relationships in most cases had been entered into earlier.

[9] Algeria, Cambodia, Egypt, India, the Islamic Republic of Iran, Morocco, Pakistan and the Syrian Arab Republic.

[10] Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Most countries do not report trade with the Republic of Korea and Taiwan Province of China.

chiefly in the form of staking out a position onto which more intensive involvement could be quickly grafted once the "climate" in the East was deemed to be propitious. The size of committed funds has remained comparatively small, perhaps $8-10 billion by late 1990, and the value of each joint venture has tended to be small, omitting some substantial deals still under negotiation or that reached fruition in early 1991. In some cases, joint or foreign-owned ventures have been of the opportunistic kind, essentially rent-seeking and often unintentionally encouraging capital flight. Furthermore, the value of disbursements has been smaller yet, perhaps $2.5 billion by late 1990 for all countries considered.

But there is little doubt that the potential for foreign direct investment in the reforming countries is considerable. Whether this will materialize, when and how, are questions that cannot be answered unambiguously. Two factors need to be recognized. One is that the reforming countries, like developing countries, are competing for the investments of transnational corporations. The latter's investment strategy is determined, by and large, by expectations about the rate of return on capital earmarked for a given project, including the repatriation of profits, and the uncertainty around that expected yield, most of which is country-specific. For now, the uncertainty of that return tends to be measurably larger than that in many more traditional host countries for foreign investment.

For as long as uncertainty about the economics and politics of reforms in the eastern part of Europe remains as large as it has recently been, foreign investors may be swayed into exploring business opportunities,[11] but they are not likely to commit themselves fully to moving production facilities *en masse* into these countries. That may happen in the future, once economic stability is restored, basic infrastructure is firmly in place and other obstacles to the transition promise to be overcome.

Until 1989, foreign assistance meant outflows from the East to developing countries. The vast bulk of foreign aid traditionally provided by Eastern Europe and the Soviet Union was channelled through various price concessions and the generation of merchandise export surpluses. These donors defined their aid much more inclusively than OECD countries. Moreover, these countries as a rule refused to subscribe to international conventions on development assistance. Their own assistance was primarily motivated by socialist solidarity and international commitments based on ideology and foreign policy, and earmarked for selected countries, especially other planned economies. Some of them, especially Cuba and Viet Nam, would have encountered great obstacles in generating aid from other sources. The reforms in the East have brought this assistance to a near halt.

The evidence suggests that there was a steady rise in the nominal value of development assistance, however measured, at least until the mid-1980s, when the flows from Eastern Europe started to decline. Also Soviet commitments and disbursements began to decelerate around 1987. Furthermore, whereas earlier it could reasonably be assumed that most loans from the East to favoured partners would be turned into grants, more recently the East has tried to have developing countries repay their debts. Thus far, only partial results have been achieved, chiefly by the debtor country shipping goods and generating an export surplus with the creditor country.

### Labour migration

Until the turmoil of late 1989, labour migration from or into Eastern Europe and the Soviet Union was discouraged, except in conjunction with the transfer of technology and development assistance. There were three exceptions to this rule. One was the measure taken by Hungary in the mid-1980s, whereby its nationals could accept employment abroad under minimal supervision by and obligations to their Government.[12] Many Hungarians decided temporarily to work abroad. Exact numbers are not known. By 1989, Hungary may have had several tens of thousands at most. Yugoslavia had permitted similar arrangements in the early 1960s. Hundreds of thousands of migrants moved to Western and Northern Europe in search of better opportunities during the 1960s and early 1970s; many stayed but others returned under the adverse impacts of the economic recession of the early 1980s.

The other took the form of emigration from Eastern Europe and the Soviet Union. This movement gathered major force in 1989 and, in the end, broke the barriers erected against it. The dramatic exodus of perhaps 600,000 people in a very few months unleashed the political transformations of late 1989 in Eastern Europe.

There was also a major exception to the rule of immigration into Eastern Europe and the Soviet Union. Because of emerging labour shortages in the late 1970s, development-assistance commitments and the need for selected developing countries to begin servicing their long-term debt, arrangements were made for citizens from chiefly the developing-country CMEA members to be gainfully employed in Eastern Europe or the Soviet Union. Again, exact numbers are not known, but it may have been half a million at its peak. Most of these migrants came from Viet Nam.

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[11] A recent phenomenon is companies from newly industrialized economies investigating opportunities for setting up ventures in the reforming countries of Europe, which in some cases may involve relocation.

[12] Chiefly social security payments and remittance of parts of earnings, both of which were substantially repealed in late 1989.

Financial assistance for the transformation in the eastern part of Europe, notably in support of resolving chronic balance-of-payments problems, emerged in 1990 as one of the key objects of international economic cooperation.[13] It will remain a critical issue for most European countries in transition, and perhaps other former planned economies as well, once they decide to embark on market-oriented reforms.

The management of Western assistance has been entrusted to five key regional and international organizations. These are the European Community on behalf of the Group of Twenty-four,[14] the European Investment Bank, the newly created European Bank for Reconstruction and Development (EBRD), the International Monetary Fund and the International Bank for Reconstruction and Development. That is not to say that all assistance is being channelled through these agencies. But the bulk of the flows through these agencies, as well as what is emanating from other private and public organs, is being predicated on the recipient country reaching an "understanding" with the Fund about restoring macroeconomic balance in a broadly conceived reform package. Not only does such an agreement lead to stand-by loans or extended credit facilities from the Fund,[15] chiefly for balance-of-payments and demand-management purposes, it usually is also the trigger to the disbursement of commitments made by many other agencies involved in West-to-East assistance.

Because of the nature and magnitude of the reform processes, donor countries and international agencies as a rule separate the issues referring to Eastern Europe, including Albania and Yugoslavia, from those concerning assistance to the Soviet Union. Whereas in late 1989, most of the assistance provided to the reforming countries of Eastern Europe was in the form of emergency assistance (such as food and medicine), in 1990 the focus shifted to the balance of payments. Among the reasons, one important consideration was that two of the reforming countries - Poland and Yugoslavia - had just declared internal convertibility for current-transaction purposes. It was deemed desirable to assist these countries in defending this convertibility by easing current and prospective current-account constraints as an essential ingredient in ensuring the success of marketization. Similarly in the case of Hungary, although it has not so far adopted currency convertibility, balance-of-payments constraints, in part on account of its substantial foreign debt, needed to be alleviated through international economic cooperation.

Politically and psychologically, the most important form of assistance provided to date to the reforming countries has been debt relief to Poland, as discussed in chapter IV, as the Paris Club has agreed to cut its debt burden in half, and France, Germany and the United States have gone even further. The financial benefits thereof are due to materialize, over several years however.

The treatment of Poland's debt will inevitably influence negotiations about other thorny debt situations, not only in Eastern Europe but also in developing countries. But the international community is still far from a consensus on how best to deal with other countries. Brazil, for example, is one of Poland's creditors and in this capacity agreed in the Paris Club to generous debt relief; it is now arguing that the same logic should apply to other middle-income countries. The Government of Japan, on the other hand, is voicing firm opposition to bilateral and uncoordinated generosity in debt negotiations, which erodes the discipline of repayment on which credit rests. Moreover, the precise extent of debt relief accorded Poland was a compromise between demand for high debt reduction, up to 80 per cent, requested by Poland and considered favourably, notably by the Government of the United States, and no debt reduction at all, as argued by the Government of Japan; major countries of Western Europe have favoured a reduction of perhaps one third.

Assistance has not been limited to debt relief and balance-of-payments support. It has also taken the form of easing access to markets in many countries by reducing tariffs, such as in the context of granting most-favoured nation (MFN) treatment and support under the General System of Preferences (GSP), or allotting larger export quotas to the reforming countries; various forms of technical assistance; humanitarian assistance (initially foodstuffs only to Poland and medical assistance to Romania, but more recently extended also to foodstuff loans to Bulgaria and Romania); and seeking ways to usher the reforming countries more closely into the framework of the European Community and EFTA. The formal "European agreements" on association status with the European Communitiy are currently under negotiation with Czechoslovakia, Hungary and Poland; a commitment in principle has been made to have them in place by 1 January 1992. The same three countries are also negotiating preferential free-trade agreements with the EFTA countries, based on an asymmetry of tariff benefits accruing immediately to the reforming countries, which will have to reciprocate only at a later date.[16]

An important kind of assistance that has recently been extended to the reforming countries has been technical advice. In the economic field, this has ranged from the basics of banking to stabilizing the economies at a time of transition to steering macroeconomic policy in a market environment with pluralistic decision-making. A good deal of support under the aegis of

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[13] For a broad review of the various types and amounts of assistance that Western countries have been providing to the countries in transition, see *Economic Survey of Europe, 1989-1990* (United Nations publication, Sales No. E.90.II.E.1), pp. 212-23; *Economic Survey of Europe, 1990-1991* (United Nations publication, Sales No. E.91.II.E.1), pp. 116-21; and *Economic Bulletin for Europe*, vol. 42 (1990) (United Nations publication No. E.90.II.E.37), pp. 79-86.

[14] This encompasses the Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom and United States), the other members of the European Community (Belgium, Denmark, Greece, Ireland, Luxembourg, the Netherlands, Portugal and Spain); the EFTA countries (Austria, Finland, Iceland, Norway, Sweden and Switzerland); Australia, New Zealand and Turkey.

[15] The Fund's compensatory and contingency financing facilities now enable the reforming countries most affected by adverse trade price developments, like other Fund members, to cover the larger-than-expected current-account deficits. The beneficiaries are Bulgaria, Czechoslovakia, Hungary, Poland and Romania.

[16] One proposal, advocated notably by the Government of Hungary, is to obtain free trade status in phases, ending in 1994, in both the European Community and EFTA in return for a commitment to phase out its tariffs by the year 2000.

the European Community has been earmarked for fighting pollution in the East. Under the PHARE (*Pologne-Hongrie: Assistance à la restructuration économique*) programme, for example, the former German Democratic Republic, Hungary and Poland received in 1990 some $93 million for programmes supporting environmental protection.

The Soviet Union is a case apart. For one thing, because of its size and the uncertain nature of its move toward still ill-defined economic reforms, Western donors decided to deal with Soviet needs separately from the concerns of the rest of the East. In 1990, international economic assistance to the Soviet Union was motivated by the emergence of severe external financial difficulties as well as pervasive domestic supply shortages, particularly of food. The Soviet Union is not a member of the international financial institutions. Also, even if it were to submit a request for accession, which it has not done thus far, political considerations would come into play to a much larger extent than was the case for Bulgaria and Czechoslovakia in 1990, Mongolia in 1990/91, or in Albania's pending application.

The Soviet Union is a founding member of EBRD, but the scope of its borrowing will be limited to its paid-in contribution to the bank's capital. It is not included in the initiative of the Group of Twenty-four and it cannot avail itself of the benefits of the PHARE programme, which itself is the contribution of the European Community to the efforts ot the Group of Twenty-four. As a result, most of the assistance extended in 1990/91 has been on account of official bilateral arrangements as well as voluntary contributions by various humanitarian organizations.

The official response to the Soviet predicament in 1990 was threefold. The Houston Summit of the Group of Seven charged the Fund as lead organization, the World Bank, the Organisation for Economic Co-operation and Development (OECD) and EBRD with preparing a study on the Soviet economy. This was finalized in late December 1990. It recommended three types of aid: foodstuffs, technical assistance and limited project assistance, especially in energy. Other assistance held out for the future, especially financial transfers, would be made contingent on the adoption of broader-based market-oriented reforms.

Second, in response to requests by the Soviet authorities, several countries and the European Community offered emergency foodstuffs, medical assistance as well as other help, usually in the form of foodstuffs or loans. Germany provided the largest amount of food assistance, perhaps $340 million in 1990. In its Rome II Summit, in December, the Council of Ministers of the European Community decided to accord ECU 750 million (about $US1 billion)[17] in food aid to the Soviet Union (one third in grants and two thirds in guaranteed medium-term loans) as well as ECU 400 million (about $540 million) for technical assistance to be rendered in 1991.

Finally, during the second half of 1990, various Governments announced some $22 billion in bilateral credits and other financial assistance (such as government guarantees) to the Soviet Union, some of which was drawn immediately to settle payment arrears, which had risen at an alarming pace in late 1989 and early 1990. However, other disbursements are being constrained by conditions placed on the type of goods or the time-frame within which the guarantees can be invoked. It is worth noting, however, that, unlike in the case of Eastern Europe (including Yugoslavia), creditors have not made disbursements of these commitments to the Soviet Union conditional on the inauguration of special stabilization or reform programmes.

Following the events in the Baltics and the increased uncertainty about the fate of *perestroyka*, there was some interruption of the dialogue between the West and the Soviet Union in late 1990 and early 1991. This affected notably the possibility of the Soviet Union's associate status in the Fund and the World Bank, including all forms of technical assistance, with which a start had been made informally during 1990. Also the European Community decided to defer temporarily further dialogue with the Soviet Union in protest mainly against the events in the Baltics. But this cooperation has since resumed.

Precisely how much assistance has been earmarked thus far by the West in support of the East's transitions is not easy to say. As of April 1991, total commitments of the Group of Twenty-four to the Soviet Union are said to amount to ECU 34 billion and to the rest of the East to ECU 30 billion (or $86 billion in all), not counting the contributions of the international financial institutions (such as IMF, World Bank and European Investment Bank) and the reduction and rescheduling of debts.[18] Total financial commitments made to Hungary and Poland by late 1990 amounted to some $21.2 billion, of which about 59 per cent had been provided by individual Governments and the remainder by various international organizations.[19] Furthermore, of the total commitments to Hungary and Poland, about $12.8 billion is in the form of new loans, $5.1 billion in the form of investment and credit guarantees, and the remainder ($3.3 billion) in the form of grants and technical assistance. These sums are upper-limit commitments for which disbursements may occur over the next several years, the time horizon of most of them being 1990-1993. As a matter of fact, rather little has been disbursed thus far, in part because of bureaucratic delays in the European Community and confusion in the potential recipients as to the best course to follow.

Whereas international assistance to Hungary and Poland has been well publicized, that to the other reforming countries has not, mainly because commitments have been made more recently or are still under negotiation. By far the largest commitments have been forthcoming from the international financial institutions. The Fund especially has been stepping up its lending to the East with the recent deals, such as with Bulgaria and Czechoslovakia, suggesting sizeable commitments indeed (see chapter IV) and more to come in case of adverse developments in the reforming countries. Once in place, these arrangements will trigger disbursements by the World Bank and under the PHARE programme amounting to several billion dollars.

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[17] All ECU data are converted at $US 1.35.

[18] *Statement by the European Community representative*, Economic Commission for Europe, *Annual Report*, Forty-Sixth Session, (9-17 April 1991), p. 4. No further details were offered or could be obtained.

[19] See *Economic Bulletin for Europe*, vol. 42 (1990), p. 83.

The national reforms are remaking most of the East in essential respects from the isolation and relative autarky that these countries pursued after World War II. With the *de facto* disappearance of CMEA in early 1991 and the demise of the transferable-rouble regimes, including notably the trade and payment provisions that it accommodated for so many decades,[20] the transformations in the East are leading to complexities that can be weathered only through international cooperation.

The initial impact of the remaking of the Eastern economies points to a comparatively pronounced and protracted recession. This in itself tends to reduce import demand and, in the short run, bolster the export offer of these countries. Also, the economically unwarranted trade and politically motivated assistance of the past are likely to shrink precipitously. This has great implications for those developing countries that traditionally maintained close ties with the East. Whereas the developing countries that themselves are reforming, such as Viet Nam, should in time be able to capitalize on the emerging markets of the East, those that cling to the traditional planning framework, such as Cuba, will encounter structural difficulties stemming from events in the East and the changed climate for East-West cooperation.

What may happen in the medium- to long-term perspective depends critically on how quickly marketization can take hold in the East and set off sustained growth. The point of take-off and the character of such a new growth path are difficult to specify, given the pervasive uncertainty that prevails, particularly in the reforming countries themselves. The likely consequences for the international involvement of the reforming economies essentially depends on existing inefficiencies, differences in productivity levels and the desire to raise the international economic involvement of these countries.

Productivity levels in the East, however measured, are well below half of what they are in Western Europe; comparisons with Japan or the United States are generally even less favourable. Reforms aiming at allocating resources in response to differences in relative economic scarcities are bound to have implications for the level, commodity composition and geographical direction of exports, owing to shifts mainly in supply. But there will also be repercussions on imports because of modifications in the aggregate demand of the reforming countries.

In the first instance, most unconventional barriers to trade will be replaced by market instruments. The incidence of quantitative and other non-tariff trade obstacles will be considerably restricted; those deemed to be prospectively required will mostly be transformed into *ad valorem* tariffs. Furthermore, these countries are all revising their customs regime and reducing tariffs to the sensible minimum, usually by adopting a fairly uniform tariff on the value of imports. This should in time lead to world trade creation, as foreign competition would force greater specialization. The trade creation may be significant, given the differences in productivity levels, the size of the reforming countries and the determination of policy makers of the reforming countries to close the gap between domestic and external relative scarcities as soon as feasible by all means that conform with the pivotal aspirations of the reform. In other words, factor endowments and productivity levels will be critical determinants of the kind of foreign demand and supply that these countries are likely to generate in the years ahead.

The population in Eastern Europe, including Albania and Yugoslavia, is just under that of France and the United Kingdom combined. Including the Soviet Union, the combined population of these reforming economies is only slightly less than that of the European members of OECD. This suggests that if these countries were to succeed in significantly narrowing the gap between their levels of factor productivity and those in Western Europe, they would constitute a significant source of global economic growth for many years to come.

In addition to changes in factor productivity, the reintroduction of more consumer sovereignty to which producers can respond within a set, rather liberal framework will induce autonomous structural changes in demand and hence in the pattern of trade. Consumer goods that traditionally have been in very short supply in most Eastern countries will elicit sizeable imports, even if for now real spending levels remain below earlier perceptions. This should benefit, in the first instance, the importation of tropical fruits and beverages for which income elasticities, even at presently reduced income levels, are considerable. Next in line will be all kinds of consumer electronics and durable consumer goods for which the elasticity of demand with respect to income is very high.

Overdue is a perspective on how the East could begin to play a constructive role in the global economic context. That would benefit not only the region, but would also open up markets for all other countries willing and able to compete. The benefits would become visible rather rapidly for the countries that are presently pursuing integration in Europe. Provided the policy does not explicitly deny outside competitors access to the new Europe on economic grounds, sizeable advantages should also materialize for developing countries.

The above scenario of measurable changes in the external economic relations of the East is based on the autonomous need for structural change, the collapse of CMEA as a trade and payment framework, the desire to integrate more fully into the European economy and the hope to participate on an equivalent basis in global economic organization. Whereas attaining this ambitious agenda within a reasonably short period of time is not at all illusory, it cannot be achieved quickly. The tasks facing decision makers of converting the planned economies into mar-

[20] Certainly, the transferable rouble was formally created in late 1963. In fact, it only nominally replaced the "clearing rouble" that had earlier been utilized in negotiating bilateral and multilateral trade and payments agreements among most of the countries that eventually adhered to the transferable-rouble regime.

ket-oriented economies are immense and of deeply rooted structural origin. Their solution will take time, commitment and forbearance on the part of the local populations. It will also lay claim to considerable outside assistance, financial as well as other. Such external support is necessary not only to alleviate the adjustment burden and anchor market orientation more firmly as soon as circumstances permit, but also to carry the process through at as steady a pace as feasible.

Conceptually, the problems of the transition can be sketched under three headings.[21] One stems from the legacies of the central-planning environment. Another derives essentially from the problems specific to the start-up and take-off of the reforms. Among the latter are questions inherent to broad-based societal reforms. There are also problems that crop up because of the external environment, including inherited and present constraints on external payments, and unanticipated changes thereof.

The legacies of central planning as well as the sheer problems of regime switching on the policy agenda of the East are considerable. Perhaps most troublesome has been the orderly dismantling of the central planning system. The legacies of forty years of detailed administrative management and the expectations of economic agents are pervasive. They include lack of familiarity with how markets operate; the absence of a broad middle class that could take over management from political or administrative decision makers; a missing managerial and entrepreneurial culture; expectations of many that the reforms would on the whole preserve most of the benefits that they had been taking for granted under communism;[22] and the absence of the institutions, legal bases and financial infrastructure of the market economy.

The structures and channels (instruments, institutions, policies and behavioural preferences) through which economic agents reach their decisions in a market environment differ widely from those typically embraced under central planning. Especially important is that human attitudes to societal behaviour in general and to economic activity in particular will have to change dramatically in a number of respects.

The reforms in the East are being introduced under rather inauspicious circumstances, which compounds the complexities that had been imagined in early 1990. One dimension is the fluid political situation. This has made gaining political consensus on the transition more difficult than anticipated by most observers. It is also proving hard to reach a social consensus on the adjustment burden (its magnitude, speed of absorption, as well as distribution over society) and agreement on the type of market-oriented economic reforms to be introduced in some credible sequence. In some countries, the various processes have been complicated by the emergence or exacerbation of ethnic strife, regional rivalries or constitutional uncertainties. In several countries, a widespread sense of hopelessness and helplessness is fueling cynicism and apathy.

Adverse external developments have contributed greatly to the complex agenda for reform. One is the set of external-payments problems that were endemic in the planned economies because of chronic shortages in domestic supplies. These are now aggravated by a sequence of unexpected developments. Among them, the most prominent is the collapse of CMEA, seen as a regional economic organization and a framework within which the participants used to conduct the vast bulk of their trade and payments. The replacement of transferable-rouble prices by world prices (in fact, increasingly prices negotiated by independent economic agents) and transferable-rouble settlements in principle with convertible-currency payments is straining the smooth conduct of trade. Furthermore, there is no coherent framework that can be substituted for the arrangements formerly available from within the transferable-rouble trade and payment regimes, however bilateralized these intragroup relations traditionally remained. Maintaining key trade flows through all kinds of *ad hoc* payments arrangements, in some cases resorting to strict barter, cannot but complicate matters.

Inasmuch as Eastern Europe has been critically dependent for its fuel and raw material supplies on the Soviet Union and that trade was conducted at below world prices, the transition is being jolted by terms-of-trade and export-revenue effects emanating from within the ex-CMEA trading area. The precise impact is unknown, but it is likely to cost Eastern Europe several billion dollars, regardless of whether the Soviet Union can maintain its export levels.

Excepting Albania and the Soviet Union, another grave external disturbance has emerged from the sharp deterioration of the East's terms of trade with market economies. This has been accompanied with revenue losses. Among the factors behind the worsening terms of trade was the volatility in world oil prices in the second half of 1990 and in early 1991. This further depressed the terms of trade of fuel importers; the Soviet Union could be a beneficiary, even at presently low world prices, provided fuel export volumes can be maintained at high levels, but this seems rather unlikely.

In the meantime, the economic situation in the East has continued to deteriorate, with sharp contractions in output and domestic demand, rising unemployment, in many countries accelerating inflation or stubbornly high inflationary pressures, substantial capacity that cannot be operated for lack of inputs or demand, and very slow responses on transforming supply and promoting the non-State sectors.

That these countries lack a managerial culture that could be quickly geared toward market-type decision-making is especially important. Furthermore, consumers and workers have been accustomed to wide social protection for more than two generations. As a result, expectations are geared toward maintaining a considerable part of this protection while at the same time benefiting in terms of wealth, incomes and availability of goods and services from the move toward the market economy. Also, the egalitarian spirit is deeply rooted in the reforming societies. This encumbers the institution of rewards according to work and the distribution of wealth on economic grounds.

[21] For a more rounded analysis of the multiple problems of the transition in the eastern part of Europe, see *Economic Survey of Europe, 1989-1990*, pp. 5ff; and *Economic Survey of Europe, 1990-1991*, pp. 119-183.

[22] But these hopes have been quickly frustated, leading to disappointment, renewed apathy and cynicism.

The ongoing transformations of the former planned economies into pluralistic market economies affect other parts of the global economy, including notably the developing countries that traditionally maintained close ties with the European countries in transition. These relations are coming about chiefly through changes in traditional commercial and financial relations. But there are also changes in the East-West environment that stem from relaxation in tensions having little to do with the marketization of these economies. The prospects for significant disarmament that existed prior to the eruption of the crisis in the Persian Gulf, German unification and growing concern about cross-border environmental degradation because of levels of pollution and other forms of environmental perils in the East are pertinent examples. These determinants of the changing climate for East-West relations too may have negative as well as positive repercussions on the rest of the world economy. At the same time, as in the case of the direct effects of the autonomous changes mentioned earlier, they harbour opportunities for global economic management in general and the creation of a more open continental economy in Europe in particular.

The rapid re-emergence of the Eastern countries in the international arena, in conjunction with the more favourable climate for West-to-East assistance, may signal the prospect of inaugurating a new climate for international economic management. Except Albania, which is still at the very beginning of this normalization process, all countries of Eastern Europe and Yugoslavia have taken measures towards entering into association agreements with the European Community and free-trade arrangements with the EFTA countries (the negotiations with Czechoslovakia, Hungary and Poland being the most advanced), as well as other European institutions, such as the Council of Europe.

## Opportunities for global economic management

The reforming countries have all regularized their position in international economic organizations; for some, negotiations are ongoing. Thus all countries of the East, except Albania and the Soviet Union, are now members of the International Monetary Fund and the World Bank; negotiations with Albania are currently taking place. Except Albania, Bulgaria and the Soviet Union, all Eastern countries are contracting parties in the General Agreement on Tariffs and Trade (GATT). Negotiations about Bulgaria's accession, first requested in 1986, have received a new impetus from reform commitments there. Countries with an odd status in GATT (such as Czechoslovakia[23]) or countries that entered through an atypical arrangement (such as Poland and Romania[24]) or that previously failed to obtain full contracting-party status (such as Hungary[25]) have by now regularized their position or are in the process of renegotiating their accession status. The Soviet Union acquired observer status in early 1990 and is eager to join GATT as a full contracting party.

There is by now no doubt that reforming countries not yet in GATT are desirous of making such a move quickly. Bulgaria's application will probably soon be approved. That leaves only Albania and the Soviet Union, though an observer, outside GATT. With some good will, the Soviet Union could be more firmly anchored into the GATT framework before long. Albania has not yet approached GATT, but it undoubtedly would be welcomed there, once its trade regime begins to be modified in the direction recently pursued by several neighbouring countries. Finally, the Eastern countries that have thus far participated only incompletely in GATT are all expected to seek a normalization of their status. This would entail a renegotiation of the reciprocity arrangements for Poland and Romania, the abolition of discriminatory quantitative restrictions under article XIII for all former planned economies that are presently in transition, the normalization of commercial relations between these countries and the United States and other adjustments. There is none the less a residual need to come to grips with the discriminatory trade regimes of former planned economies that are not yet committed to opening up their economies on a competitive basis. Furthermore, the transition in those that are committed to marketization in an open environment needs to be carefully monitored to ensure that trade liberalization and domestic structural change remain in harmony without harming the interests of other contracting parties.

The disintegration of the transferable-rouble regime has led several countries to seek to strengthen their participation in the international monetary system. Those reforming countries that remained outside the International Monetary Fund and the World Bank before 1990 quickly requested membership and obtained it. Thus Bulgaria and Czechoslovakia joined in September 1990. Romania, which before the political change of 1989 had at times had a strained relationship with the Washington institutions, quickly re-examined this stance. It has since been actively cooperating with both institutions in designing a structural adjustment programme and its balance-of-payments financing (see chapter IV). Albania sent in its application for accession to the IMF and the World Bank in mid-January 1991.

This leaves only the Soviet Union outside the Fund and the Bank. For some time around the Houston summit of July 1990, there was considerable good will toward the Soviet Union among the major partners of the Washington institutions. A Soviet delegation participated in the autumn 1990 meetings in Washington, a Fund mission was instrumental in preparing a study on the state of the Soviet economy for the Group of Seven and for a while sufficient political support had been garnered for creating a special "associate status" for the Soviet Union. This

[23] Czechoslovakia was one of the founder Contracting Parties. However, because of its transformation into a planned economy beginning in February 1948, its status in the GATT was affected by the revocation of rights by the United States and the settlement of trade relations by other GATT Contracting Parties on *ad hoc* grounds.

[24] Both obtained full contracting-party status by committing themselves to raising their imports from market-economy Contracting Parties by some magnitude, but important derogations of the General Agreement, notably article XIII, were maintained against the two planned economies.

[25] Although admitted on market-economy grounds, Hungary failed to have discriminatory and special safeguard restrictions against it removed, as promised notably by the European Community.

would have permitted the institutions to furnish technical assistance at several different levels, but not to grant loans, and the Soviet Union to get acquainted with the workings of the organizations. The events in the Baltic States in early 1991 have put that plan on hold for now. There is still hope, however, that the principles earlier worked out will be acted upon soon, especially if the Soviet Union were to make a credible commitment to market-oriented reforms.

The above suggests a remarkable paradox. Because of the transformations in the East the system of global economic management envisaged at Bretton Woods could perhaps now be implemented, but it would hardly be relevant to the problems the world confronts going into the 1990s and beyond. There are several reasons for this position. First, the universality of the global economic institutions designed in the 1940s has become too unwieldy, given the greatly expanded number of sovereign participants and the reluctance of any member to yield measurably on the prerogatives of national sovereignty. Instead of "universal" management, there is thus room for exploring "representative government," perhaps in the sense in which it was mooted a few years ago in the then-felt need for some global organ to ensure "international economic security". Also the precise role of these institutions, as well as the abortive debate on the International Trade Organization, given the experiences of the past four decades, might usefully be re-examined. Second, the question of development assistance in all of its forms (including foreign direct investment, preferential access to markets and ODA) as part and parcel of "appropriate" development strategies did not figure at Bretton Woods, given that the colonial Powers were by and large still intact. Many of the related issues of capital mobility would have to be re-examined. Likewise, concerns about the environment should figure prominently in redesigning global economic management.[26] Third, the system of fixed-parities is no longer extant, and bringing the former planned economies more fully into the present flexible exchange-rate system will require some imaginative redesigning of the monetary regime, lest the present system become determined by the yen-dollar-ECU axis by default. Finally, the attempts to bolster global economic management in the late 1940s were phrased in the context of the prevailing view on how the global economy functioned. These precepts are hardly subscribed to at this juncture. In fact, there is no uniform view on how the global system functions and could be improved at this stage. Also, the vital problems of reconstruction and rehabilition of vast parts of the membership of the Bretton Woods institutions in the immediate post-war period are no longer part of the international debate. On the other hand, the core issues of global economic management and policy coordination going into the 1990s, with the formation of multiple trading blocs, are yet to be fully addressed.

The above suggests that an attempt should be made to update the Bretton Woods' spirit of tackling global issues to prevailing and prospective concerns about global economic management.

**Impact on regional integration**

One striking aspect of events in Eastern Europe and the Soviet Union over the past two years has been the *de facto* disintegration of CMEA, as discussed in chapters III and IV. This has affected primarily the short-term economic outlook of the European member countries. However, the marked changes in CMEA as a regional cooperation framework have dramatically transformed the environment for the three other full members, most of the eight cooperants and other developing countries that have traditionally maintained close ties with the East. Of course, changes taking place in the reforming countries themselves are having palpable repercussions for trade prospects, as well as the delivery of development assistance, for all countries that maintained sizeable economic intercourse with the eastern part of Europe.

The most important repercussions from the ongoing reforms are manifesting themselves through shifts in trade and financial patterns among the former planned economies of Asia[27] and Europe. There are essentially three effects to be taken into account. One is the reduced ability of the reforming countries to supply one another with needed goods and services, especially those that used to be the object of security of supply considerations in the CMEA mainstream trade and payment provisions. Especially critical here is the ability of the Soviet Union to supply the rest of the East with essential fuels and raw materials, the outlook for which, given the downward spiral of Soviet economic fortunes, is not good.

Another is the tightening constraint on the amount of trade that can be cleared within the traditional trade and payments arrangements or the variety of alternatives to the transferable-rouble mechanisms currently being explored. With economic decentralization and economic agents financially responsible, shifts occur in traditional determinants of supply and demand. Previously, plan needs and the preferences of the ministerial bureaucracy, accommodated within administrative provisions, determined the level, commodity composition and geographical direction of trade, rather than individual enterprises acting on the basis of profitability considerations. This has two consequences. One is that agents will seek more efficient economic solutions by reducing disparities between relative domestic and external scarcities. The other stems from the fact that these scarcities are now being revealed by different agents.

Finally, these changes can be accommodated only if the trade and payments framework of the transforming economies allow such transactions to take place with minimal interference. This is not yet the case. Indeed, lessening flexibility for engaging in regular commercial transactions among the Eastern countries, especially in finding ways of settling such transactions and coming to grips with bilateral imbalances, has become a pronounced feature of recent developments.

The combined result of the above developments has been a

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[26] It is not surprising that one of the key items in the emerging West-to-East cooperation has been combating environmental degradation, streamlining the heavily polluted environment in the East and assisting the restructuring process with more up-to-date technology and environmentally friendlier production processes. This requires not only technical advisory services, but also substantial capital to finance the imports of the necessary equipment. Similar efforts could be made on a wider scale, including for many developing countries.

[27] Except China, which for a variety of reasons sharply reduced its dependence on trade with the East in the early 1960s. Some recovery occurred in the 1980s, but China's trade is only marginally dependent on the East (in 1988/89, less than 7 per cent of total exports and imports were with Eastern Europe and the Soviet Union).

gradual contraction of intragroup trade values at a time of already strained import possibilities from convertible-currency countries. This drop became noticeable in 1989 and accelerated sharply in 1990 (see chapter III); it is expected to be even more pronounced in the current year, and the precipitous collapse of intragroup trade in early 1991 does not augur well at all. This has been putting some pressure on Western markets. But the bulk of the effect is being transformed into downward pressures on feasible output levels, augmenting the need for Western assistance.

However, prior to its *de facto* demise, the malaise in CMEA ran much deeper than capacity constraints and the limitations on trade opportunities emanating from the trade and payment frameworks, which in principle required bilateral balancing of reciprocal flows pre-specified in detailed commercial agreements. The implications for intragroup economic cooperation and trade are disquieting. The probability of any major change being enacted to foster more buoyant economic relations within the group as a whole, or at least among the more radically reforming Eastern countries, appears very slim at this juncture. A clearing or payments mechanism, perhaps with Western financial and supervisory assistance, might be critical in overcoming some of the trading problems associated with the transition.[28]

The upshot of the rancorous exchanges on the future of CMEA and its probable replacement by the Organization for International Economic Cooperation (OIEC) later in 1991 has been profound uncertainty. This has further exacerbated the already pervasive sense of confusion and frustration hampering traditional trade and payment relations of these countries. The only agreement that apparently has been acceptable to all, at least in principle, is the replacement of the conventional arrangements for trade and payments and those within the framework of bilateral trade and payments agreements as well as within the comparable CMEA-wide provisions, with "global" conditions.

In principle, transferable-rouble prices ceased to be negotiated in 1990 because it was decided to pattern prices from 1991 onward after current world prices and to settle, in principle, all transactions in convertible currency. Although there is probably some sense in which prices in intragroup trade have recently become more closely attuned to world prices, the latter continue to be well removed from market-clearing levels. Indeed, various national, regional and local government organs, especially in the Soviet Union, are still negotiating all kinds of trade arrangements. Among them straightforward trading at world prices and in convertible currency are but two of the many, not necessarily exceptional, outcomes.

These repercussions have affected the commercial and financial relations with other partners, developed as well as developing economies, if only through pressures for diverting trade away from the CMEA group. Should such a swift redirection of trade not be possible or if it were to entail major external imbalances, there would perforce be adverse effects for sustainable levels of economic activity in the reforming countries, thereby compounding the scale and depth of the structural-adjustment problems.

Reforms in the cooperation patterns as well as in trade and payments arrangements in the eastern part of Europe are having significant implications for the external relations of these countries with the rest of the world, especially with those countries that traditionally have maintained intimate ties with the former planned economies. Mongolia, for example, traditionally cleared over 90 per cent of its total trade with the CMEA, especially the Soviet Union. A less spectacular level of dependence, but nevertheless the less between two thirds and four fifths of total trade, also prevailed for Cuba and Viet Nam. Though precise magnitudes are not known, the dependence of many CMEA cooperants and other developing countries that closely collaborated with the CMEA or its key European members must also have been pronounced.

The reforming countries of Europe have been trying to redirect their external links primarily towards Western Europe and to solicit various kinds of assistance measures from the industrial countries. The direct impact thereof on industrial countries is likely to remain small, given the scale of the operations. However, these changes, especially when combined with the resources that the West is mobilizing for the reforming countries, may indirectly be exerting a negative effect on developing countries.

### Impact on trade and the international trading system

Judging by the results obtained during the first year of the transition and the daunting transformation problems that lie ahead, Eastern Europe's competitive position in world markets is not likely to improve dramatically any time soon. This appraisal applies even to Eastern countries, such as Poland, that sustained a sharp contraction in levels of economic activity in 1990 while making significant progress toward marketization. Whereas its trade with the West rose by nearly 50 per cent, it did so from a low base and under rather unusual circumstances, especially the sharp contraction in domestic demand because of the monetary and income squeeze, and the incremental access to Western markets it obtained on preferential terms. Such an export effort can be sustained only by bolstering domestic production on a competitive basis, something that is quite slowly emerging from the restructuring efforts. Neither is the region likely to become a significant source of global demand, given the income and wealth losses associated with the initial phases of the transition. The outlook for regaining economic growth over the next two or three years, as discussed in chapter II, is not bright. Hence, the potential for the region to wage competition in Western markets appears rather subdued. In fact, it can be argued that, with the collapse of intragroup trade, the reforming countries are likely on the whole to compete more with each other in Western markets than with other countries.

[28] The establishment of such facilities was earlier argued in *Economic Survey of Europe, 1989-1990*, pp. 147-150 and *World Economic Survey, 1990*, p. 98. In addition to smoothing payments through external financial support, strict external surveillance to ensure trade liberalization in tandem with domestic economic reforms would be essential.

But this rather pessimistic outlook is at marked variance with the longer-term opportunities, discussed in the preceding section, of fusing the countries in transition more fully into the global scheme of things. It also depends critically on how the East will be allowed to benefit from the trade, finance, and monetary regimes in place. Finally, pressures to step up trade with the West is, in good measure, a function of how quickly some semblance of stability and normality can be regained in the intragroup trade of these countries.

There are several considerations that suggest with reasonable certainty that, in time, the impact of the restructuring processes even on trade with the developing countries will be strongly trade-creating. No quantitative estimates of likely consequences are available, but some broad sources of the change can be discussed.

One source of the growth of export for developing countries is bound to emanate from the strengthening of their competitive position, as the economic structures of the reforming countries in Europe are shifted to reflect their economic scarcities. Another impulse will come from the abolition of the State monopoly of foreign trade and payments, which used to complicate access to these markets. This was nowhere more onerous than for countries that chose not to enter into broad Government-to-Government trading and financing agreements with most of the East or that were previously prevented from reaching such an understanding for political reasons. Among those were precisely some of the more dynamic of the market-oriented developing countries.

There is no doubt, though, that considerable ingenuity, especially in trade financing, will be required to enable developing countries to establish positions in these emerging markets of the East. This is particularly so at a time when marked structural transformations are materializing, and there is little chance of quickly instituting currency convertibility[29] as part and parcel of the early stages of inducing market-oriented reforms.

The reforms in the East also offer opportunities to the select group of developing countries that traditionally maintained close ties with the East and are themselves reforming, as discussed earlier. Viet Nam especially would appear to be well positioned to respond to rising consumer demand in the East for tropical fruits, beverages, aquatic and other foodstuffs, and a variety of raw materials, especially non-ferrous metals. Prior experience with the Eastern countries should be a bonus to capitalizing on these emerging opportunities. These benefits depend, however, on existing relations not being sharply curtailed for a protracted period of time. They will also be determined by the degree to which resources in these developing countries can be exploited at a time of internal reforms and obstacles to foreign capital inflows, especially in Viet Nam. Again, some ingenuity may be required to facilitate the accommodation of such flows for as long as partners cannot afford to place their reciprocal trade on a convertible-currency basis.

On the other hand, the reforming Eastern economies, especially in Central Europe, may thus in the long run become more important competitors of developing countries, particularly in Western Europe. Owing in part to low wage cost and proximity to vibrant markets, they are bound to compete especially with many products of the NIEs at the lower end of technological sophistication. Many of these products are already under some kind of trade-managing restraints (such as outright quotas and voluntary export restraints) in the West.

If the reforming countries were to obtain preferential access to markets in Western Europe, over and beyond the elimination of the discriminatory quantitative restrictions traditionally maintained in particular by the European Community against them, the negative effects of this increased competition for developing countries might be quite sizeable in the short run. Much of the outcome would depend, however, on the buoyancy of economic activity in the reforming countries and their main trading partners.

Preferential access to Western markets might be arranged in various ways, including the removal of discriminatory quantitative restrictions, the easing or removal of quantitative restrictions for the reforming countries but not for other countries, and various types of tariff concessions. The latter would include preferential arrangements coming under the European association agreements under negotiation with the European Community or the preferential, asymmetric free-trade agreements currently being considered by EFTA for several countries of the East, notably Czechoslovakia, Hungary and Poland.

The removal of discriminatory quantitative restrictions by the European Community *vis-à-vis* Eastern Europe, which may on the margin temporarily disadvantage some developing countries, should be welcomed in the context of the international trade regime in place, including efforts being made to streamline it in the context of the Uruguay Round. The easing of quantitative restrictions, in general, without discriminating against other countries, should also be applauded for its own sake as well as in the context of the trade liberalization sought under the Uruguay Round.

Reducing quantitative restrictions or granting preferential tariff arrangements in favour of the European reforming countries would be undesirable, unless these relations could be finalized in the strict context of article XXIV of the General Agreement. That includes informal as well as formal arrangements that would give the reforming countries of Europe discriminatory tariff reductions, asymmetric reciprocity, larger shares of established quotas for "sensitive" products and other such preferential treatments. Some measures of this kind have already been enacted, notably in favour of Hungary and Poland, and are presently slated for other countries under the provisions of the PHARE programme.

However, the impact of these preferential arrangements and those currently being considered in the context of "European" association agreements and the asymmetric free-trade arrangements should not be exaggerated. Although these allow for

[29] Limited domestic currency convertibility for merchandise transactions was instituted by Poland and Yugoslavia in 1990 and by Czechoslovakia in 1991. Since late 1990, Yugoslavia has had to devalue twice, in the process restraining its limited convertibility. Whether it can be sustained in Czechoslovakia and Poland under prevailing conditions, and even more when domestic demand and Polish debt-servicing resumes, remains to be seen.

asymmetric reciprocity, current negotiating stances are such that the tariff reductions will be enacted only for manufactures and only for those that are not short-listed as "sensitive" in some sense. That means that the bulk of the potential offer of manufactures from the reforming East, if competitive at all, will not benefit from the discriminatory removal of the external tariffs on them. However, special protocols might be attached to the association or free-trade agreements that would improve the East's access for some sensitive products.

The more complete merging of the reforming countries under the discipline of the General Agreement should be beneficial. It would place the access of these countries to markets of contracting parties under agreed discipline for which enforcing mechanisms exist, though they have not been effective in recent years. It should also give an impetus to buttressing GATT and strengthen the framework for trade expansion once the reforms in the East take off.

### Impact on development assistance rendered by the East

The implications of the reforms in the East for Eastern development assistance and the potential for aid diversion due to West-to-East assistance both depend to a considerable extent on how the reform processes in the East are managed. Quick transformation and opening up to external competition, such as occurred for the former German Democratic Republic, cannot but exacerbate the short-term socio-economic costs of the transition, which may have to be relieved through sizeable Western assistance in an attempt to maintain social consensus and cohesion in the reforming countries.

As analysed earlier, developing countries that traditionally maintained intimate economic links with CMEA in the past, for whatever reason, benefited from substantial economic assistance embedded in and transmitted through the peculiar trade and payments regimes of that framework for international economic collaboration. In addition, they had fairly easy access to technical assistance from the European CMEA members; their nationals were trained in the Eastern host countries; and they obtained advice and training by cadres from the East in their own countries. Furthermore, sizeable numbers of young people from these countries, especially the three full CMEA members, found temporary employment in the East. The latter advantage was especially important for Viet Nam for three reasons, namely, education and technical training, coping with surplus labour that could not be productively employed at home in the short run[30] and servicing part of its transferable-rouble debt through the local compensations and remittances of guest workers in the East. Such benefits can no longer be counted on, and expatriate workers are returning in droves well ahead of the deadlines set in agreements for their temporary employment signed before the 1989 events in the East. This is intensifying pressures notably on the Vietnamese economy.

With the commercialization of economic decisions in the European CMEA members, the real cost of development assistance extended in particular to the non-European CMEA members and also the other favoured developing countries is now being carefully scrutinized. At a time of palpable internal and external economic imbalances, and even political turmoil, in the East, chances of holding assistance levels at present levels, let alone of raising them, are not at all promising. Furthermore, no alternative political philosophy on delivery of development assistance has emerged in the East. Particularly Cambodia, Cuba and Viet Nam, but also Afghanistan, Angola, Ethiopia and Mozambique, will have to come to grips with sharply declining real levels of development assistance from the European reforming economies. This is manifesting itself not only in trade, finance and reverse labour migration; also, countries that had previously been supplemented with ample resources for higher education and research in the East now face greater demands on domestic training and research capabilities.

The more painful the transition in the East in terms of social and political imbalances, or in the length and depth of the recession, the greater the impact will be on the economically warranted commerce of the developing countries that maintained strong links, for whatever reasons, with the East. Certainly the terms of trade, in the broad sense, of these agreements will change. The greater commercialization of these exchanges will also lead to the compression of other elements, such as scientific and technical cooperation. There is also likely to be a negative export-revenue effect, stemming from rapid changes in resource allocation in some parts of the East, as explained earlier.

### Impact on resource flows from the West

The repercussions of developments in the East-West context on financial flows in the global economy differ depending on the kind of flows (including aid, official bilateral and multilateral assistance, foreign direct investment and portfolio investment). In this equation, the role of German unification and the massive "regional" transfer of resources that will be entailed need to be touched upon because the adverse impacts of this movement will depend on precisely how, and how quickly productivity levels in the eastern part of Germany can be stabilized and raised.

Regarding aid from other countries than the East, most developed economies have publicly committed themselves not to divert funds earmarked for developing countries to the East. Instead, such funds will on the whole be additional to ODA budgets and in any case will not be on ODA terms. That does, of course, imply that such funds channelled to the transitional economies of Europe could have been allocated to developing countries. On the other hand, such funds emerged because of the extraordinary events in the East. There is simply not sufficient political support in the West for measurably raising ODA appropriations.

But one should consider the potential implications of current budgetary stringency in many developed countries. Because of slow growth and recession in some major countries, fiscal reforms and aid fatigue, assistance budgets of several developed countries have recently come under increasing pressure. Also, any sharp deviation of developments in the East from the antici-

[30] The reduction of Viet Nam's defensive efforts, including the demobilization of military personnel following the withdrawal from Cambodia, has aggravated the already sizeable unemployment problem in the country.

pated scenario of reform might reverse the present stance on ODA.

Considering financial transfers other than ODA flows from bilateral and multilateral agencies, there seems to be little doubt that the East has been competing with similar flows to developing countries. This potential conflict derives basically from the fact that effective budgets of national and international organs that deal with external assistance programmes are entrusted with issues pertaining to the economies in transition as well, and hence have to be divided over a larger number of borrowers.

Although under some adverse circumstances there might be marginal room for revising appropriations in national budgets of some substantial aid donors to the reforming Eastern countries, the effective budgets of international financial organizations have not been raised sufficiently to maintain their potential and desirable levels of lending to developing countries, while at the same time raising appropriations for Eastern Europe. However, the World Bank has ample room for mobilizing additional resources in capital markets, given its authorized and subscribed capital. It would be desirable to do so in order to avoid having to spread around resources more thinly, possibly disadvantaging developing countries. Likewise in the case of the Fund. The ninth review of quotas has been completed but awaits ratification. Of course, the newly founded EBRD has been provided with "new" money - a total capital of ECU 10 billion (about $13.5 billion) and it can now start borrowing in financial markets.

One factor that should be considered here is the beneficial effect of a sharp reduction in military budgets and ancillary expenses that for so long were justified by the Cold War. Whereas the peace dividend of converting military facilities to civilian uses, while not completely superfluous, is generally small, the savings on expenditures that would otherwise have had to be earmarked could in time offer some margin of flexibility. Of course, such a reduction in government expenditures will in the first instance be deflationary, especially in countries where expenditure reduction will be utilized to regain a better balanced budget. None the less, either lower taxes or less crowding out in financial markets cannot but exert a beneficial effect from lowering expenditures for military budgets. That may furthermore strengthen the environment for regular commercial interchange between countries that used to belong to different social and economic systems.

That leaves the question of the impact of Eastern reforms on private foreign direct investment and portfolio investment. So far the volume of foreign direct investment allocated to the reforming Eastern countries has been small. The diversion of such flows from what would otherwise have been available to developing countries, if any, must have been minuscule and, for all practical purposes, negligible. However, there is little doubt that the potential for foreign direct investment in the reforming countries is considerable. Whether this will be realized, when and how are questions that cannot be answered unambiguously with the information on hand.

If it does materialize, the impact on private investments in developing countries will be temporary and rather small. The total supply of foreign direct investment is not fixed. Also, profitable investment opportunities are likely to elicit funding, possibly after some delay because at any time a marginally more profitable venture, perhaps in the East, may divert such resources. This also means that claims to the effect that aid to the East would make it more difficult for developing countries to access technology, a claim that in any case could have been valid only for embodied technology, are unlikely to be borne out, except in the short run, when supply of funds for foreign direct investment might be considered fixed.

Given the prevailing uncertainty about the course to be taken in many of the reforming Eastern economies over the next two years or so, the inflow of foreign direct and portfolio investment is likely to remain small, although perhaps slightly more than the overall volumes experienced so far. But totals are in all expectations bound to remain modest, certainly in comparison with total available global savings and total foreign direct investment undertaken by transnational corporations.

Even if the transformation processes were to accelerate substantially so that the reforming countries would quickly improve their absorptive capacity, the total amount of foreign capital that might enter these reforming countries would accelerate. But this is unlikely to entail major diversions from potential foreign direct investment into developing countries. For one thing, although there has recently been some rise in investment funds flowing to the developing countries, the vast bulk of developing countries have not really seen any substantial inflows of such resources in recent years. Moreover, even with the introduction of market-oriented reforms many of the developing countries would have to wait some time before a response from the side of foreign direct investment would be forthcoming.

It may be recalled that capital flows into the developing countries in the 1980s have been heavily concentrated in a select few recipients. The vast majority of the developing world, especially the less developed countries of sub-Saharan Africa, has not really benefited from the global reallocation of corporate funds earmarked for capital formation by transnational corporations. But there is a distinct possibility, particularly in the case of Germany, that funds that would otherwise be available for investment in the NIEs would now be earmarked for the five eastern states (or *Länder*). However, as the experience to date suggests, even such a substantial shift is likely to be gradual rather than abrupt and massive, because the underlying productivity gap can be closed only over a substantial period of time.

For as long as uncertainty about the economics and politics of reforms in the East remains as large as it has recently been, foreign investors may be swayed into exploring business opportunities. But they are unlikely to commit themselves full-scale to moving production facilities *en masse* into these countries. That may happen in the future, once economic stability is restored, basic infrastructure (such as telecommunications, roads, commercial banking and property rights) is firmly retooled and other obstacles to the transition, especially social, political and those arising from the legacies of central planning, begin to be overcome.

### Impact on the international monetary system

In the new, more congenial environment for East-West cooperation, several issues are worth considering relative to the prospective role of the Fund in reforms in the East as well as in

spurring along an adaptation of the international monetary regime, especially if the Economic and Monetary Union in Europe were to be strengthened.

Regarding the Fund's role in the East and Eastern reforms, three topics are worth pondering. One is extending the adjustment discipline of the Fund to the former planned economies, especially when placed in the broader context of the Fund's lead role in managing Western financial assistance. Bringing the transitional economies under the Fund's current-account discipline should in the medium to long term be deemed desirable. For one thing, the movement toward currency convertibility in the reforming economies cannot but facilitate capitalizing on the competitive position of developed and developing countries in these markets. Also, it would measurably ease the process of coordinating assistance to the East and improve management of the global economy. This calls for broadening the Fund's approach to structural reform, directing its primary focus on balance-of-payments financing and demand management onto a much broader canvas for policy-making. Coming to grips in a coherent fashion with the problems of supply rigidity and institution-building of the countries in the East could benefit also other countries whose external payments problems are deeply rooted in structural issues.

Another topic is moving toward currency convertibility, at least for current-account purposes (such as stipulated in article VIII of the Fund's Articles of Agreement). Although this is not a requirement of Fund membership, given the possibility of article XIV status, gaining convertibility has been allotted a high priority on the policy agenda of the political leaderships of several Eastern reforming economies. Ensuring an orderly transition to current-account convertibility would facilitate the Eastern reforms and accelerate the realization of the benefits from reforms for these and other participants in the global economy.

Finally, there is, of course, the question of the debt burden, which is very substantial for several reforming countries. Some Fund resources have already been called upon by the indebted countries of the East. Their sums probably exceed what would have been forthcoming for those (such as Poland) that are already members of the Fund if they had not been going through their momentous revolutions since 1989. But these demands on Fund resources are unlikely to be such as to inhibit the Fund from financing balance-of-payments requirements of other members. However, if substantial structural-adjustment loans were to be forthcoming, such competition for Fund resources might well materialize, unless quick action were taken to ratify the ninth quota review.

In the context of the unprecedented efforts to assist the East, a resolution of the chronic debt problem of other transitional economies may be in the offing. If such a constructive step were to crystallize, motivated by the desire to buttress flow activity and set aside the burden of stocks inherited from past mismanagement or domestic and external adversities, it could presage similar moves to the benefit of developing countries.

Orderly global economic management could be strengthened through the enactment of greater coordination in economic policies. That would permit more stable exchange rates and placing the major currencies, including the ECU and the SDR, into a framework that aims at facilitating the coordination of economic policies to the benefit of all. Once the reforming countries are brought fully into that framework and their transitional problems have been overcome, there will certainly be an opportunity to re-examine how the process of European monetary unification fits into the international monetary regime. Some steps toward reform may then be contemplated with the support of all major actors in the world economy.

## B. International economic relations of Eastern Europe and the Soviet Union until about 1989

Important insights into how the external aspects of the crystallizing reform strategies can be expected to evolve may be obtained from an examination of the traditional economic links that the economies in transition have maintained with the rest of the world. Section B, therefore, clarifies this interdependence through trade, capital movements, labour mobility and development assistance observed in the recent past, chiefly the 1980s.

### Problems with data

To do so, a brief discussion of the severe limitations of the available databases is appropriate. Measures of international linkages of the economies in transition, either individually or as a group, are often blurred by several empirical problems. One stems from the fact that only some countries produce comprehensive and consistent data, at least on some aspects of their international involvement. Even for this select group of countries, the statistical information is far better for merchandise trade than, say, financial flows, labour migration or development assistance.

Available statistics are rarely based on standard international accounting principles or conventions.[31] For one thing, the dichotomy between domestic and trading sectors in these countries led to the establishment of an exchange rate that was purely notional. Further, trade within CMEA was mostly based on an independent set of prices - the so-called transferable-rouble prices. In some cases, these bore some relationship to world prices, albeit usually on the basis of an average of world prices of the five years preceding the transaction year. Excepting chiefly raw materials, most were, in fact, negotiated bilaterally. Bilateral prices exhibited a wide dispersion around the reference derived from actual or imputed world prices. As a result, there was a substantial dichotomy between trade denominated in transferable roubles and in convertible currency that is difficult to ignore, and still harder to erase, when examining aggregate data; it certainly cannot be corrected without laborious

[31] All CMEA members were, in principle, obligated to report their trade statistics to the statistical office of CMEA according to the standard CMEA trade nomenclature, which is almost identical to the Soviet Union's. However, all countries but Bulgaria and the Soviet Union reported their own trade statistics differently. Although some information may have been submitted to the CMEA secretariat in a standard format, severe restraints were placed on disclosure.

recomputations, for which the source data are simply not available. There have also been significant shifts over time and across the Eastern countries in these biases, the nature of only some of which can be readily explained. Finally, for most countries, detailed data in current prices and key indicators of shifts in prices and volumes are simply not available; when they are, the classification criteria utilized, in most cases, cannot be reconciled with other data, including those of CMEA partners.

There are severe limitations to deriving useful information from measurements in current prices in one currency unit that transcend the conventional problems encountered in such computations. Indeed, the vast bulk of trade among the former CMEA countries until 1990 was conducted at transferable-rouble prices evaluated at largely artificial exchange rates; but the exact extent of the bias varies from country to country. For these reasons, trade trends measured in United States dollars can be quite different from trends measured in roubles, and each set will depend on the precise exchange rates (especially the implicit rouble-dollar cross-rates) used to convert the data. This may lead to vexing problems, especially in aggregations. Similarly, trends measured in constant rouble or dollar prices may sharply deviate from comparable trends measured in current rouble or dollar prices. Again, this problem is familiar from international comparisons. But for the planned economies, it was compounded by the dual or even more complex (because of various clearing arrangements other than effected within the principal transferable-rouble regime) price systems utilized in foreign trade. It is most unfortunate that measurements at constant and comparable prices and exchange rates are simply not available. Their reconstruction is exceedingly laborious and unreliable even when the primary data are available.

The insufficiency of source data of the East is nowhere greater than in the relations of these countries with the developing world, however defined. This holds true in particular for trade data reported by the Soviet Union: they are incomplete not only with respect to the reported partner countries (that is, the sum of reported individual countries does not even approximately add up to the reported total for trade with all developing countries); this feature holds even more true for the commodity composition of trade (the sum of reported commodity flows being much smaller than reported country totals and, *a fortiori*, than reported totals for trade with all developing countries).

It also needs to be noted that there has been a sharp deterioration in the statistical reporting of trade over time. This is particularly pronounced for Soviet exports. Thus, whereas in the early 1970s the official statistical releases documented roughly 70 per cent of the East's exports to identified developing-country partners, in the early 1980s this declined to slightly more than half, possibly because of the rapid rise of defence-related exports and trade with "inconvenient" partners, such as Israel and South Africa. The lacunae in imports, although also growing, are far less glaring than for exports. None the less, they obfuscate in particular Soviet trade patterns.

The growing gap between reported group totals and the sums of reported countries of origin and destination in the case of Eastern Europe proper stems largely from the serious lacunae in foreign trade data published by the former German Democratic Republic since about 1975, including its decision to report only bilateral trade turnover data for a highly select group of partners. The same holds for Romania since 1986, when the foreign trade reporting suddenly all but vanished, especially in the case of most bilateral flows. Both circumstances preclude applying standard quantitative measures with a view to drawing up a fairly rounded picture of the past external linkages of Eastern Europe and the Soviet Union.[32] For all these and related reasons, the analysis here will refer chiefly to the standard trade statistics compiled and reconciled to some degree by the Statistical Office of the United Nations Secretariat[33] and the statistical authorities of CMEA.[34]

## Overall external-trade links

This section discusses the broad features of trade (level, geographical distribution and commodity composition) of the trade of Eastern Europe and the Soviet Union, chiefly in the 1980s.

### Overall level of trade

Total trade in current prices of Eastern Europe and the Soviet Union combined (see tables VI.1 and VI.2), measured at then prevailing official exchange rates, hovered around $400 billion a year in the late 1980s - less than 6 per cent of world (including intragroup) trade turnover.[35] This was about equally divided between Eastern Europe and the Soviet Union, precise shares being strongly influenced by price developments, notably of energy. This was a sharp increase over levels observed in the mid-1970s, but only marginally better than, say, in 1980. The increase of about one third in the current value of trade be-

[32] The data of Yugoslavia exhibit particular difficulties in their own right. Perhaps the most problematic is that, until 1986, foreign trade data were assessed at statistical exchange rates that, in fact, had little to do with actual transaction exchange rates. Also, Yugoslavia is as a rule included among "developing countries" in reporting by the United Nations.

[33] The key source utilized is the trade matrix, which is annually published in the May issue of *Monthly Bulletin of Statistics* and then reported in *International Trade Statistics Yearbook*, both United Nations publications edited under the auspices of The Statistical Office of the United Nations Secretariat. This relies on data reported by participants in the trade data base known as COMTRADE. In addition, it seeks to reconcile inconsistencies in mirror statistics and to fill in gaps when important countries fail to report the proper information. But these data are far from perfect. Also, note that there are severe limits to redefining country groups in the United Nations classifications. Furthermore, as of the date of writing, the matrix for 1989 is not yet ready, so computations had to be restricted to the period ending in 1988.

[34] The most important source here is *Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godu - statisticheskiy sbornik chast I - obshchie itogi* (Moscow, Sekretariat SEV, 1990). This statistical publication has been prepared annually since at least the mid-1960s. However, it was previously available only for internal use in the CMEA secretariat and a select group of policy makers from member countries or their advisers. The above issue is the first one made available to outsiders. The most recent data disclosed here are for 1989.

[35] If a uniform cross-rate, reflecting approximate purchasing power, between the transferable rouble and the dollar were utilized, the dollar value would obviously be much smaller (at 2 transferable roubles to the dollar, the estimated magnitude for trade turnover would roughly reduce to under $250 billion or well under 4 per cent of world trade turnover).

tween 1980 and 1988, which did not noticeably change in 1989/90,[36] suggests that the real growth in trade has been rather modest. This could signal a retreat in the opening up of these economies over the past decade, which was in marked contrast to the rapid rise in trade in the preceding two decades.

Table VI.1. Eastern Europe and the Soviet Union: distribution of exports by broad geographical groups, 1975-1988

| Year | World | Developed[a] | Developing[b] | Intragroup[c] | Asia[d] | Developed[a] | Developing[b] | Intragroup[c] | Asia[d] |
|---|---|---|---|---|---|---|---|---|---|
| | (Millions of dollars) | | | | | (Percentage) | | | |
| | | | | | Total | | | | |
| 1975 | 77384 | 20345 | 10207 | 44391 | 1963 | 26.29 | 13.19 | 57.36 | 2.54 |
| 1980 | 155115 | 48317 | 23171 | 78657 | 4187 | 31.15 | 14.94 | 50.71 | 2.70 |
| 1981 | 156663 | 45600 | 26727 | 79237 | 3956 | 29.11 | 17.06 | 50.58 | 2.53 |
| 1982 | 165069 | 48743 | 29158 | 82182 | 4416 | 29.53 | 17.66 | 49.79 | 2.68 |
| 1983 | 174846 | 50592 | 29895 | 89095 | 4743 | 28.94 | 17.10 | 50.96 | 2.71 |
| 1984 | 175010 | 50713 | 28970 | 89797 | 4974 | 28.98 | 16.55 | 51.31 | 2.84 |
| 1985 | 172196 | 41377 | 30531 | 91625 | 6335 | 24.03 | 17.73 | 53.21 | 3.68 |
| 1986 | 190078 | 38255 | 32324 | 109585 | 8005 | 20.13 | 17.01 | 57.65 | 4.21 |
| 1987 | 207826 | 43703 | 35498 | 118114 | 8726 | 21.03 | 17.08 | 56.83 | 4.20 |
| 1988 | 216110 | 47221 | 36001 | 122389 | 9475 | 21.85 | 16.66 | 56.63 | 4.38 |
| | | | | | Soviet Union | | | | |
| 1975 | 33310 | 9582 | 6165 | 16449 | 1100 | 28.77 | 18.51 | 49.38 | 3.30 |
| 1980 | 76449 | 27618 | 14106 | 32221 | 2447 | 36.13 | 18.45 | 42.15 | 3.20 |
| 1981 | 79003 | 26941 | 15804 | 33616 | 2592 | 34.10 | 20.00 | 42.55 | 3.28 |
| 1982 | 86912 | 29353 | 18316 | 36181 | 2974 | 33.77 | 21.07 | 41.63 | 3.42 |
| 1983 | 91343 | 30036 | 18733 | 39222 | 3250 | 32.88 | 20.51 | 42.94 | 3.56 |
| 1984 | 91649 | 30078 | 18086 | 39913 | 3491 | 32.82 | 19.73 | 43.55 | 3.81 |
| 1985 | 87201 | 22357 | 19456 | 40825 | 4460 | 25.64 | 22.31 | 46.82 | 5.11 |
| 1986 | 97335 | 18707 | 21497 | 51175 | 5872 | 19.22 | 22.09 | 52.58 | 6.03 |
| 1987 | 107873 | 22457 | 24457 | 54411 | 6521 | 20.82 | 22.67 | 50.44 | 6.05 |
| 1988 | 110559 | 24158 | 24685 | 54028 | 7564 | 21.85 | 22.33 | 48.87 | 6.84 |
| | | | | | Eastern Europe | | | | |
| 1975 | 44074 | 10763 | 4042 | 27942 | 863 | 24.42 | 9.17 | 63.40 | 1.96 |
| 1980 | 78666 | 20699 | 9065 | 46436 | 1740 | 26.31 | 11.52 | 59.03 | 2.21 |
| 1981 | 77660 | 18659 | 10923 | 45621 | 1364 | 24.03 | 14.07 | 58.74 | 1.76 |
| 1982 | 78157 | 19390 | 10842 | 46001 | 1442 | 24.81 | 13.87 | 58.86 | 1.85 |
| 1983 | 83503 | 20556 | 11162 | 49873 | 1493 | 24.62 | 13.37 | 59.73 | 1.79 |
| 1984 | 83361 | 20635 | 10884 | 49884 | 1483 | 24.75 | 13.06 | 59.84 | 1.78 |
| 1985 | 84995 | 19020 | 11075 | 50800 | 1875 | 22.38 | 13.03 | 59.77 | 2.21 |
| 1986 | 92743 | 19548 | 10827 | 58410 | 2133 | 21.08 | 11.67 | 62.98 | 2.30 |
| 1987 | 99953 | 21246 | 11041 | 63703 | 2205 | 21.26 | 11.05 | 63.73 | 2.21 |
| 1988 | 105551 | 23063 | 11316 | 68361 | 1911 | 21.85 | 10.72 | 64.77 | 1.81 |

Source: Based on data collection of the Statistical Office of the United Nations Secretariat.

[a] Developed market economies as defined by the Statistical Office.

[b] Developing market economies as defined by the Statistical Office.

[c] Eastern Europe and Soviet Union.

[d] Former Asian centrally planned economies (China, Democratic People's Republic of Korea,Mongolia and Viet Nam).

[36] Trade turnover in 1988 and 1989 at the newly established official exchange rates (including retrospectively), which are not yet reflected in the Statistical Office compilations, was $371 billion and $380 billion, respectively. For 1989 and 1990 the data, without the German Democratic Republic, were $345 billion and $331 billion. Because of the overvaluation of the foreign-exchange leva and mainly the foreign-exchange rouble with respect to the dollar, these magnitudes are still well above what would have prevailed at more realistic cross-rates.

TableVI.2. Eastern Europe and the Soviet Union: distribution of imports by broad geographical groups, 1975-1988

| Year | World | Developed[a] | Developing[b] | Intragroup[c] | Asia[d] | Developed[a] | Developing[b] | Intragroup[c] | Asia[d] |
|---|---|---|---|---|---|---|---|---|---|
| | (Millions of dollars) | | | | | (Percentage) | | | |
| | | | | | Total | | | | |
| 1975 | 82137 | 27902 | 8703 | 44391 | 1140 | 33.97 | 10.60 | 54.05 | 1.39 |
| 1980 | 143907 | 46268 | 16306 | 78657 | 2676 | 32.15 | 11.33 | 54.66 | 1.86 |
| 1981 | 144009 | 44693 | 18001 | 79237 | 2079 | 31.03 | 12.50 | 55.02 | 1.44 |
| 1982 | 144938 | 41597 | 19120 | 82182 | 2038 | 28.70 | 13.19 | 56.70 | 1.41 |
| 1983 | 148979 | 39461 | 17820 | 89095 | 2603 | 26.49 | 11.96 | 59.80 | 1.75 |
| 1984 | 148316 | 38622 | 16969 | 89797 | 2929 | 26.04 | 11.44 | 60.54 | 1.97 |
| 1985 | 151672 | 33735 | 22523 | 91625 | 3790 | 22.24 | 14.85 | 60.41 | 2.50 |
| 1986 | 169831 | 35734 | 19860 | 109585 | 4652 | 21.04 | 11.69 | 64.53 | 2.74 |
| 1987 | 179938 | 37846 | 18816 | 118114 | 5161 | 21.03 | 10.46 | 65.64 | 2.87 |
| 1988 | 192427 | 43051 | 20793 | 122389 | 6196 | 22.37 | 10.81 | 63.60 | 3.22 |
| | | | | | Soviet Union | | | | |
| 1975 | 35170 | 13489 | 5566 | 15582 | 533 | 38.35 | 15.83 | 44.30 | 1.52 |
| 1980 | 61924 | 24051 | 9701 | 26937 | 1235 | 38.84 | 15.67 | 43.50 | 1.99 |
| 1981 | 65976 | 25688 | 11402 | 27842 | 1044 | 38.94 | 17.28 | 42.20 | 1.58 |
| 1982 | 68784 | 26550 | 12043 | 28940 | 1250 | 38.60 | 17.51 | 42.07 | 1.82 |
| 1983 | 69120 | 25273 | 10905 | 31392 | 1549 | 36.56 | 15.78 | 45.42 | 2.24 |
| 1984 | 68390 | 24596 | 10012 | 31944 | 1838 | 35.96 | 14.64 | 46.71 | 2.69 |
| 1985 | 70121 | 20860 | 14151 | 32782 | 2328 | 29.75 | 20.18 | 46.75 | 3.32 |
| 1986 | 72479 | 20476 | 11744 | 37323 | 2935 | 28.25 | 16.20 | 51.49 | 4.05 |
| 1987 | 75350 | 20494 | 11457 | 40325 | 3075 | 27.20 | 15.21 | 53.52 | 4.08 |
| 1988 | 83729 | 24387 | 12486 | 43139 | 3718 | 29.13 | 14.91 | 51.52 | 4.44 |
| | | | | | Eastern Europe | | | | |
| 1975 | 46967 | 14413 | 3137 | 28809 | 607 | 30.69 | 6.68 | 61.34 | 1.29 |
| 1980 | 81983 | 22217 | 6605 | 51720 | 1441 | 27.10 | 8.06 | 63.09 | 1.76 |
| 1981 | 78033 | 19005 | 6599 | 51395 | 1035 | 24.36 | 8.46 | 65.86 | 1.33 |
| 1982 | 76154 | 15047 | 7077 | 53242 | 788 | 19.76 | 9.29 | 69.91 | 1.03 |
| 1983 | 79859 | 14188 | 6915 | 57703 | 1054 | 17.77 | 8.66 | 72.26 | 1.32 |
| 1984 | 79926 | 14026 | 6957 | 57853 | 1091 | 17.55 | 8.70 | 72.38 | 1.37 |
| 1985 | 81551 | 12875 | 8372 | 58843 | 1462 | 15.79 | 10.27 | 72.15 | 1.79 |
| 1986 | 97352 | 15258 | 8116 | 72262 | 1717 | 15.67 | 8.34 | 74.23 | 1.76 |
| 1987 | 104588 | 17352 | 7359 | 77789 | 2086 | 16.59 | 7.04 | 74.38 | 1.99 |
| 1988 | 108698 | 18664 | 8307 | 79250 | 2478 | 17.17 | 7.64 | 72.91 | 2.28 |

Source: Based on data collection of the Statistical Office of the United Nations Secretariat.

[a] Developed market economies as defined by the Statistical Office.

[b] Developing market economies as defined by the Statistical Office.

[c] Eastern Europe and Soviet Union.

[d] Former Asian centrally planned economies (China, Democratic People's Republic of Korea,Mongolia and Viet Nam).

This is largely corroborated by looking at changes in export and import volumes (see tables VI.3 and VI.4).[37] A striking feature of these data is the steady decline of real growth in exports and imports over time. During most of the 1980s, excepting the Soviet Union, at least for imports, the pace approximately equalled growth in aggregate output (at least, as officially measured). Data show that real trade in the 1980s reportedly grew by almost 3 per cent, slightly more for exports than for imports. However, real growth for Eastern Europe's imports was well below that mark, while the Soviet Union's imports grew by 4 per cent in real terms.

## The geographical distribution of trade

Tables VI.1 and VI.2 also show data in current prices and the corresponding percentages of the geographical distribution of exports from and imports into, respectively, Eastern Europe and the Soviet Union by major country groups (developed market economies, developing countries and the planned economies, all as per the Statistical Office's definitions with the exception of Yugoslavia[38]). For ease of analysis, figures VI.1 and VI.2 show graphically how this distribution has evolved during the 1980s.

[37] The CMEA yearbook omits data for Romania as such, but these data are presumably reflected in the group totals. This conjecture is based on the fact that for all volume indices only the 1987 data for CMEA as a whole are being referenced as omitting Romania (see *Vneshnyaya torgovlya stran-chlenov...*,p. 29).

[38] Beginning with 1985, the Statistical Office allocated trade data for Yugoslavia with the group of developing countries. Because Yugoslavia here is an integral part of the East and comparable data prior to 1985 are not available, its data were taken out of the developing-country groupings. However, the Statistical Office does not permit the redistribution of flows allocated to some countries that used to be counted as members of the "socialist world economic system" - an important category to be dealt with later. Thus, China, the Democratic People's Republic of Korea, Mongolia and Viet Nam are reported as "Asian planned economies", the Lao People's Democratic Republic as "Other Asia" and Cuba as "Caribbean". The latter two, hence, remain in the developing-country category. This does not really distort the picture for Asia, as trade of the Lao People's Democratic Republic is negligible. But it does affect the picture of trade with Latin America, owing to the importance of Cuba, especially in Soviet trade.

TableVI.3. Eastern Europe and the Soviet Union: growth of export volume, 1970-1989

(Average annual compound rates of growth)

| | 1971-1980 | | | | 1981-1985 | | | | 1981-1989 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] |
| Bulgaria | 8.8 | 4.9 | 11.0 | 18.9 | 7.2 | 8.4 | -2.4 | 11.0 | 3.7 | 5.4 | -1.2 | -1.5 |
| Czechoslovakia | 5.3 | 3.3 | ... | ... | 4.5 | 5.4 | 3.0 | 3.5 | 2.6 | 3.5 | 3.3 | -2.2 |
| German Democratic Republic | ... | ... | ... | ... | 6.5 | 4.5 | 11.2 | -1.8 | 3.0 | 2.3 | 6.0 | -8.0 |
| Hungary | 8.5 | 2.8 | 5.3 | 11.9 | 5.0 | 5.7 | 3.2 | 5.3 | 3.5 | 2.4 | 5.3 | 1.2 |
| Poland | 7.0 | 1.6 | 5.5 | 10.1 | 1.6 | 3.6 | -1.3 | -4.4 | 3.0 | 4.0 | 2.6 | -2.8 |
| Romania | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Soviet Union | 5.0 | 2.4 | 3.8 | 5.8 | 1.9 | 0.3 | 2.8 | 3.3 | 3.0 | 1.0 | 5.1 | 2.9 |
| CMEA Total | ... | ... | ... | ... | 3.7 | 3.3 | 4.3 | 2.8 | 3.1 | 2.4 | 4.7 | 0.2 |

*Source*: *Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godustatistichesky sbornik chast I - obshchie itogi* (Moscow: Sekretariat SEV, 1990).

[a] Developed market economies as defined by CMEA.

[b] Developing market economies as defined by CMEA.

TableVI.4. Eastern Europe and the Soviet Union: growth of import volume, 1970-1989

(Average annual compound rates of growth)

| | 1971-1980 | | | | 1981-1985 | | | | 1981-1989 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] |
| Bulgaria | 8.6 | 8.6 | 9.0 | 5.8 | 6.0 | 2.6 | 11.9 | 28.2 | 3.6 | 1.2 | 8.2 | 16.2 |
| Czechoslovakia | 3.6 | 6.0 | ... | ... | 0.3 | 0.7 | -1.5 | 1.9 | 1.7 | 1.9 | 1.5 | 1.7 |
| German Democratic Republic | ... | ... | ... | ... | 1.5 | -0.2 | 3.2 | 3.1 | 2.9 | -0.1 | 6.5 | -2.6 |
| Hungary | 6.0 | 6.1 | 5.6 | 2.1 | 1.2 | 0.6 | 2.0 | -1.7 | 1.2 | 0.5 | 2.3 | -2.7 |
| Poland | 8.5 | 6.9 | 10.9 | 10.8 | -3.0 | 0.0 | -7.2 | -13.0 | 0.3 | 0.7 | 0.2 | -5.7 |
| Romania | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Soviet Union | 8.0 | 6.4 | 11.5 | 5.8 | 6.0 | 6.4 | 3.8 | 7.4 | 3.9 | 4.0 | 2.0 | 7.2 |
| CMEA Total | ... | ... | ... | ... | 3.1 | 3.1 | 2.0 | 4.3 | 2.8 | 2.1 | 3.1 | 3.8 |

*Source*: *Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godustatistichesky sbornik chast I - obshchie itogi* (Moscow: Sekretariat SEV, 1990).

[a] Developed market economies as defined by CMEA.

[b] Developing market economies as defined by CMEA.

Three features of these data are worth stressing. One is the overwhelming share of intragroup trade. During the 1980s, that share hovered around half of overall trade, when official data are converted at official exchange rates for statistical purposes, as they are in the tables, and around one third when the data are converted at more meaningful, but estimated, cross-rates between the transferable rouble and the dollar. At official exchange rates, there was a tendency for that share to rise by the mid-1980s. This upward drift had two origins. One was purely related to prices. World prices of energy and raw materials by the mid-1980s were sharply weakening, a trend that tended to compress the share of trade with market economies. Also, by the early 1980s most countries of Eastern Europe, and later the Soviet Union, began to tackle head-on their external-payments pressures in relations with convertible-currency partners. This called for curbing imports to conserve foreign exchange.

Although the share of intragroup trade of the European CMEA countries was large, several asymmetries should be stressed. Looking at the Soviet Union, the share of its exports with Eastern Europe depended a great deal on fuel export prices. In the wake of the run-up in CMEA fuel prices until about 1986, when also transferable-rouble prices for energy began to contract markedly in response to the earlier drop in world prices, that share declined.[39] The share of exports to developed market economies, chiefly in Europe, dropped from 36 per cent in 1980 to just over 20 per cent in the late 1980s. On the other hand, the share of developing countries in Soviet exports rose from some 18 per cent in the mid-1970s to about 22 per cent in the late 1980s. The rapid increase in the share of trade with the Asian planned economies - from 2 to 4 per cent - during that time period owed much to the normalization of trade ties with China.

In imports (see table VI.2), on the other hand, the primacy of CMEA was, of course, roughly as noted for exports, although the share of the European CMEA rose slightly. Furthermore, the share of developed market economies for the Soviet Union contracted from nearly 40 per cent in the early 1980s to less than 30 per cent by the end of the decade - none the less,

[39] World energy prices reached bottom by the time transferable-rouble prices peaked in 1986.

Figure VI.1. Eastern Europe and the Soviet Union, geographical distribution of exports, 1980-1988
(Percentages)

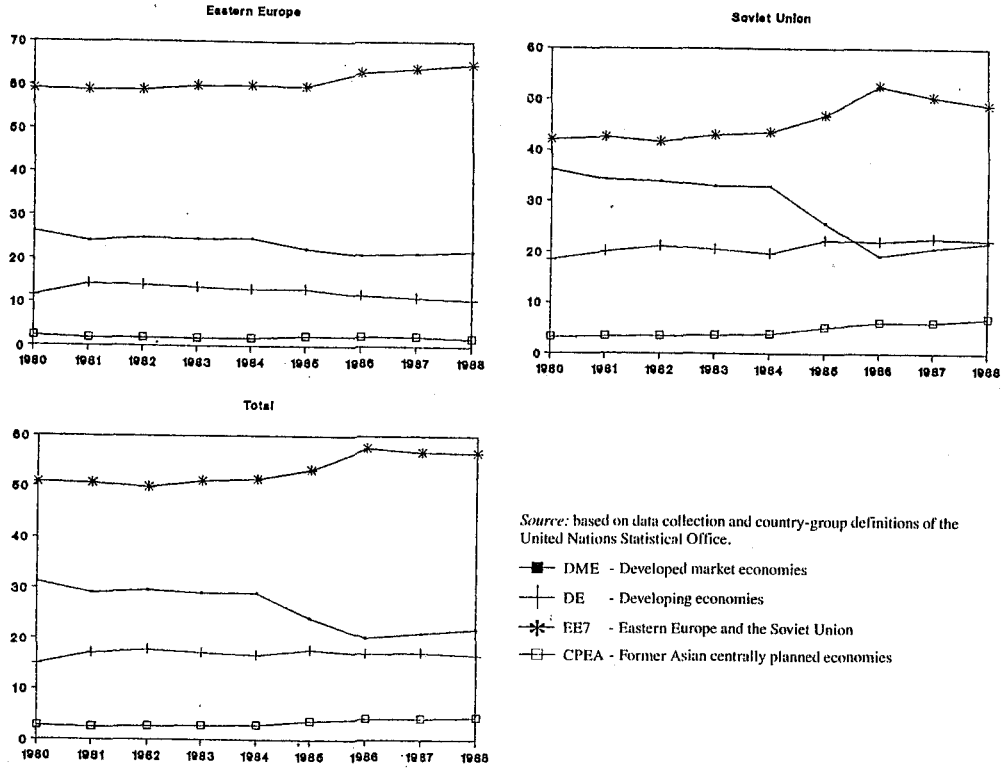



Figure VI.2. Eastern Europe and the Soviet Union, geographical distribution of imports, 1980-1988
(Percentages)

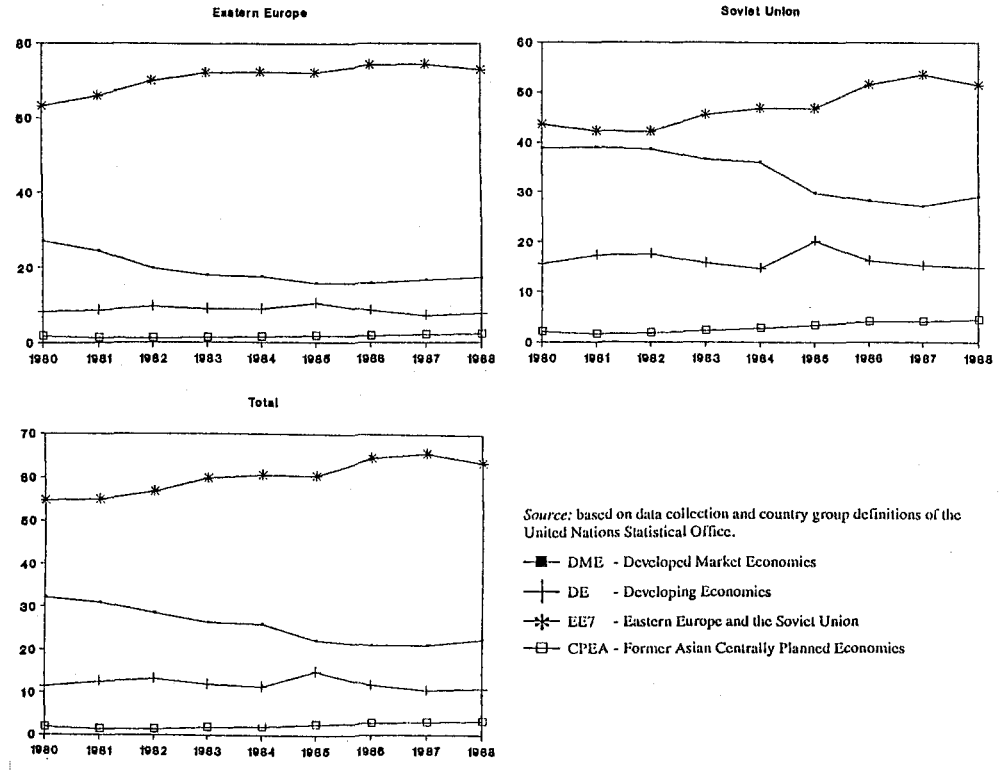


Table VI.5. Eastern Europe and the Soviet Union: commodity composition of exports by partner groups, 1970-1989

| | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] |
|---|---|---|---|---|---|---|---|---|
| | (Millions of transferable roubles) | | | | (Percentage) | | | |
| 1970 | | | | | | | | |
| Total | 27875.3 | 16791.5 | 6029.7 | 2980.1 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 9144.7 | 6669.3 | 482.7 | 1143.5 | 32.8 | 39.7 | 8.0 | 38.4 |
| Fuels and industrial raw materials | 8659.6 | 4821.2 | 2708.8 | 495.9 | 31.1 | 28.7 | 44.9 | 16.6 |
| Agricultural products | 5216.9 | 2425.4 | 2074.9 | 357.4 | 18.7 | 14.4 | 34.4 | 12.0 |
| Manufactured consumer goods | 3242.8 | 2181.9 | 748.6 | 178.0 | 11.6 | 13.0 | 12.4 | 6.0 |
| Others | 1611.3 | 693.7 | 14.7 | 805.3 | 5.8 | 4.1 | 0.2 | 27.0 |
| 1980 | | | | | | | | |
| Total | 112097.9 | 60646.0 | 30040.9 | 12350.9 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 32580.7 | 24891.9 | 1997.2 | 3878.6 | 29.1 | 41.0 | 6.6 | 31.4 |
| Fuels and industrial raw materials | 46855.0 | 19444.1 | 19612.8 | 2759.7 | 41.8 | 32.1 | 65.3 | 22.3 |
| Agricultural products | 16054.7 | 8348.0 | 5068.7 | 1458.2 | 14.3 | 13.8 | 16.9 | 11.8 |
| Manufactured consumer goods | 10070.1 | 5642.7 | 2984.5 | 556.1 | 9.0 | 9.3 | 9.9 | 4.5 |
| Others | 6537.4 | 2319.3 | 377.7 | 3698.3 | 5.8 | 3.8 | 1.3 | 29.9 |
| 1985 | | | | | | | | |
| Total | 163443.6 | 99076.7 | 36323.3 | 16239.9 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 49400.5 | 39441.7 | 1812.6 | 5441.7 | 30.2 | 39.8 | 5.0 | 33.5 |
| Fuels and industrial raw materials | 70341.9 | 34661.0 | 25449.9 | 3847.9 | 43.0 | 35.0 | 70.1 | 23.7 |
| Agricultural products | 20147.1 | 12218.3 | 5365.3 | 1330.9 | 12.3 | 12.3 | 14.8 | 8.2 |
| Manufactured consumer goods | 13783.3 | 8712.5 | 3447.2 | 543.9 | 8.4 | 8.8 | 9.5 | 3.3 |
| Others | 9770.8 | 4043.2 | 248.3 | 5075.5 | 6.0 | 4.1 | 0.7 | 31.3 |
| 1989 | | | | | | | | |
| Total | 185424.1 | 100838.9 | 56223.1 | 19288.5 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 57871.9 | 44816.6 | 5078.8 | 5413.7 | 31.2 | 44.4 | 9.0 | 28.1 |
| Fuels and industrial raw materials | 70532.2 | 30450.3 | 30877.5 | 5063.3 | 38.0 | 30.2 | 54.9 | 26.3 |
| Agricultural products | 24557.0 | 10667.3 | 10889.3 | 1790.5 | 13.2 | 10.6 | 19.4 | 9.3 |
| Manufactured consumer goods | 19265.1 | 9668.2 | 8202.5 | 939.7 | 10.4 | 9.6 | 14.6 | 4.9 |
| Others | 13197.9 | 5236.5 | 1175.0 | 6081.3 | 7.1 | 5.2 | 2.1 | 31.5 |

*Source: Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godu statistichesky sbornik chast I - obshchie itogi* (Moscow: Sekretariat SEV, 1990).

[a] Developed market economies as defined by CMEA.

[b] Developing market economies as defined by CMEA.

almost 10 percentage points more than observed for exports. For developing countries, their share in total Soviet imports was small: only 15 per cent in 1988. Also, for the former Asian planned economies, the share remained comparatively small, although it more than doubled during the decade, once again reflecting the re-establishment of sizeable commercial ties between China and the Soviet Union.

The share of intragroup trade for Eastern Europe surpassed the Soviet Union's. On average, some 60 per cent of the exports from Eastern Europe used to be conducted within the context of the European CMEA. The share of developed countries in Eastern Europe's exports was about one fourth in the early 1980s and declined to just over one fifth by the end of the decade. Trade with developing countries underwent several changes, its share dropping from 12 per cent in the early 1980s to slightly over 10 per cent by the end of the decade, after some considerable rise in the first half of the 1980s, owing to energy imports.

Regarding Eastern Europe's imports, the preponderance of the European CMEA (over 70 per cent during most of the 1980s) and the almost negligible role of the developing countries (some 7 per cent in the late 1980s) stand out; the former Asian planned economies did not account for more than 1-2 per cent of Eastern Europe's imports. On the other hand, the share of developed market economies, which was around 27 per cent early on in the decade, slipped precipitously to barely above 17 per cent. Whereas the vast bulk - over 90 per cent - of trade of Eastern Europe and the Soviet Union, singly or in combination, with developed market economies was with Western Europe, chiefly the European Community, the commercial links between the European CMEA countries and the developing countries exhibit greater diversity, apart from the fact that the overall shares of these countries in total trade varied to a considerable degree, on which more later.

According to information on changes in export and import volumes (see tables VI.3 and VI.4), most countries of Eastern Europe appear to have made a major effort to bolster export volume to the European CMEA. During the first half of the 1980s, only the German Democratic Republic raised its export volume to CMEA at a rate inferior to the volume increase for total exports. During subsequent years, however, both the German Democratic Republic and Hungary allotted highest priority to the correction of imbalances with developed market economies. On the other hand, imports from the CMEA area in real terms during most of the 1980s grew very sluggishly, if at all.

Table VI.6. Eastern Europe and the Soviet Union: commodity composition of imports by partner groups, 1970-1989

| | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] |
|---|---|---|---|---|---|---|---|---|
| | (Millions of transferable roubles) | | | | (Percentage) | | | |
| *1970* | | | | | | | | |
| Total | 27227.6 | 16701.6 | 7006.6 | 2036.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 9625.8 | 7024.8 | 2419.4 | 7.4 | 35.4 | 42.1 | 34.5 | 0.4 |
| Fuels and industrial raw materials | 7795.8 | 4841.0 | 2150.9 | 433.4 | 28.6 | 29.0 | 30.7 | 21.3 |
| Agricultural products | 6457.4 | 2394.9 | 1919.3 | 1428.7 | 23.7 | 14.3 | 27.4 | 70.2 |
| Manufactured consumer goods | 3019.0 | 2135.1 | 499.1 | 164.4 | 11.1 | 12.8 | 7.1 | 8.1 |
| Others | 329.6 | 305.8 | 17.9 | 2.1 | 1.2 | 1.8 | 0.3 | 0.1 |
| *1980* | | | | | | | | |
| Total | 111630.6 | 59511.5 | 33010.5 | 9077.6 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 36478.9 | 24950.3 | 9693.9 | 71.4 | 32.7 | 41.9 | 29.4 | 0.8 |
| Fuels and industrial raw materials | 38704.7 | 19286.0 | 11006.8 | 3228.0 | 34.7 | 32.4 | 33.3 | 35.6 |
| Agricultural products | 25422.6 | 8143.3 | 10271.7 | 5190.2 | 22.8 | 13.7 | 31.1 | 57.2 |
| Manufactured consumer goods | 9295.2 | 5705.4 | 1853.9 | 570.9 | 8.3 | 9.6 | 5.6 | 6.3 |
| Others | 1729.2 | 1426.5 | 184.2 | 17.1 | 1.5 | 2.4 | 0.6 | 0.2 |
| *1985* | | | | | | | | |
| Total | 158347.6 | 97865.8 | 37944.2 | 11998.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 52805.7 | 39190.4 | 10757.7 | 399.4 | 33.3 | 40.0 | 28.4 | 3.3 |
| Fuels and industrial raw materials | 56722.7 | 34296.5 | 13200.4 | 5173.9 | 35.8 | 35.0 | 34.8 | 43.1 |
| Agricultural products | 30088.7 | 12487.2 | 10290.6 | 5499.5 | 19.0 | 12.8 | 27.1 | 45.8 |
| Manufactured consumer goods | 14960.4 | 8741.2 | 3381.6 | 909.4 | 9.4 | 8.9 | 8.9 | 7.6 |
| Others | 3770.1 | 3150.5 | 313.9 | 16.5 | 2.4 | 3.2 | 0.8 | 0.1 |
| | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| *1989* | | | | | | | | |
| Total | 184469.6 | 100782.3 | 59900.3 | 14967.7 | 100.0 | 100.0 | 100.0 | 100.0 |
| Machinery | 67319.8 | 42829.2 | 21771.6 | 741.3 | 36.5 | 42.5 | 36.3 | 5.0 |
| Fuels and industrial raw materials | 56950.1 | 30849.1 | 17622.3 | 6218.2 | 30.9 | 30.6 | 29.4 | 41.5 |
| Agricultural products | 32616.6 | 11290.8 | 13923.7 | 5817.2 | 17.7 | 11.2 | 23.2 | 38.9 |
| Manufactured consumer goods | 19721.9 | 9822.1 | 5408.6 | 1953.6 | 10.7 | 9.7 | 9.0 | 13.1 |
| Others | 7861.2 | 5991.1 | 1174.1 | 237.4 | 4.3 | 5.9 | 2.0 | 1.6 |

*Source:* *Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godu-statistichesky sbornik chast I - obshchie itogi* (Moscow: Sekretariat SEV, 1990).

[a] Developed market economies as defined by CMEA.

[b] Developing market economies as defined by CMEA.

A notable development, especially where the developing countries are concerned, is the substantially negative growth in real exports in the second half of the 1980s, as earlier reported. It is reflected in the trends for all former planned economies of Europe, except Czechoslovakia, the German Democratic Republic and Hungary; but an acceleration occurred only for Poland, because it was recovering from the sharp cut-backs of the early half of the 1980s. Exactly the reverse trends prevailed for real imports: real imports from developing countries rose for all countries, except those that bolstered real exports. This offers *prima facie* evidence that the environment for the transfer of development assistance to developing countries in the 1980s, to the extent such assistance is in fact effected through net exports, turned considerably less buoyant than it apparently was in the preceding decade or even during the first half of the 1980s. This stemmed largely from tightening external-payments constraints and a flagging pace of domestic output growth for many countries of the East.

## Commodity composition of trade

For a variety of reasons, the broad commodity composition of Eastern Europe's and the Soviet Union's trade with various groups of countries has been considerably more asymmetric than if these countries had patterned their trade according to comparative advantages in the world economy, as argued earlier. This proposition can be empirically illustrated by looking at two complementary ways in which the foreign trade statistics are organized. One is according to the Standard International Trade Classification (SITC) used in the compilations of the Statistical Office of the United Nations Secretariat. The other relies on the CMEA's trade classification known as *edinnaya tovarnaya nomenklatura* (ETN) or Uniform Commodity Classification utilized in CMEA statistical yearbooks. These two ways of organizing trade data are not compatible, the former being oriented more toward producer sectors, whereas the latter is basically geared to user sectors. Of course, there are many other discordances of the data organized according to these two sets of organizing principles.[40]

Utilizing the ETN data, the four commodity groups retained are machinery for investment purposes (ETN 1), non-agricultural industrial raw materials (ETN 2-4), agricultural raw materials and foodstuffs (ETN 5-8) and durable consumer goods

[40] For reference purposes, the category "developed market economies" in CMEA accounting comprises all countries other than those belonging to the "socialist world economic system" and the non-socialist developing countries.

Table VI.7. Eastern Europe and the Soviet Union: destinations of exports by commodity groups, 1970-1989
(Percentage)

| | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] |
|---|---|---|---|---|---|---|---|---|
| | | *1970* | | | | *1985* | | |
| Total | 100.0 | 60.2 | 21.6 | 10.7 | 100.0 | 60.6 | 22.2 | 9.9 |
| Machinery | 100.0 | 72.9 | 5.3 | 12.5 | 100.0 | 79.8 | 3.7 | 11.0 |
| Fuels and industrial raw materials | 100.0 | 55.7 | 31.3 | 5.7 | 100.0 | 49.3 | 36.2 | 5.5 |
| Agricultural products | 100.0 | 46.5 | 39.8 | 6.9 | 100.0 | 60.6 | 26.6 | 6.6 |
| Manufactured consumer goods | 100.0 | 67.3 | 23.1 | 5.5 | 100.0 | 63.2 | 25.0 | 3.9 |
| | | *1980* | | | | *1989* | | |
| Total | 100.0 | 54.1 | 26.8 | 11.0 | 100.0 | 54.4 | 30.3 | 10.4 |
| Machinery | 100.0 | 76.4 | 6.1 | 11.9 | 100.0 | 77.4 | 8.8 | 9.4 |
| Fuels and industrial raw materials | 100.0 | 41.5 | 41.9 | 5.9 | 100.0 | 43.2 | 43.8 | 7.2 |
| Agricultural products | 100.0 | 52.0 | 31.6 | 9.1 | 100.0 | 43.4 | 44.3 | 7.3 |
| Manufactured consumer goods | 100.0 | 56.0 | 29.6 | 5.5 | 100.0 | 50.2 | 42.6 | 4.9 |

*Source:* *Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godustatisticheskiy sbornik chast I - obshchie itogi* (Moscow: Sekretariat SEV, 1990).

[a] Developed market economies as defined by CMEA.

[b] Developing market economies as defined by CMEA.

Table VI.8. Eastern Europe and the Soviet Union: sources of imports by commodity groups, 1970-1989
(Percentage)

| | Total | CMEA | Developed[a] | Developing[b] | Total | CMEA | Developed[a] | Developing[b] |
|---|---|---|---|---|---|---|---|---|
| | | *1970* | | | | *1985* | | |
| Total | 100.0 | 61.3 | 25.7 | 7.5 | 100.0 | 61.8 | 24.0 | 7.6 |
| Machinery | 100.0 | 73.0 | 25.1 | 0.1 | 100.0 | 74.2 | 20.4 | 0.8 |
| Fuels and industrial raw materials | 100.0 | 62.1 | 27.6 | 5.6 | 100.0 | 60.5 | 23.3 | 9.1 |
| Agricultural products | 100.0 | 37.1 | 29.7 | 22.1 | 100.0 | 41.5 | 34.2 | 18.3 |
| Manufactured consumer goods | 100.0 | 70.7 | 16.5 | 5.4 | 100.0 | 58.4 | 22.6 | 6.1 |
| | | *1980* | | | | *1989* | | |
| Total | 100.0 | 53.3 | 29.6 | 8.1 | 100.0 | 54.6 | 32.5 | 8.1 |
| Machinery | 100.0 | 68.4 | 26.6 | 0.2 | 100.0 | 63.6 | 32.3 | 1.1 |
| Fuels and industrial raw materials | 100.0 | 49.8 | 28.4 | 8.3 | 100.0 | 54.2 | 30.9 | 10.9 |
| Agricultural products | 100.0 | 32.0 | 40.4 | 20.4 | 100.0 | 34.6 | 42.7 | 17.8 |
| Manufactured consumer goods | 100.0 | 61.4 | 19.9 | 6.1 | 100.0 | 49.8 | 27.4 | 9.9 |

*Source:* *Vneshnyaya torgovlya stran-chlenov Soveta ekonomicheskoy vzaimopomoshchi v 1989 godustatisticheskiy sbornik chast I - obshchie itogi* (Moscow: Sekretariat SEV, 1990).

[a] Developed market economies as defined by CMEA.

[b] Developing market economies as defined by CMEA.

(ETN 9). In the case of the SITC data, the commodity groups retained for analysis are agriculture (SITC 0+1), fuels (SITC 3), industrial raw materials (SITC 2+4) and manufactures (SITC 5-8); where useful, the latter category is disaggregated into chemicals (SITC 5), machinery (SITC 7) and other manufactures (SITC 6+8) or some suitable combination thereof.

As regards the composition of overall trade, exports of the former planned economies of Europe (see table VI.5) as well as their imports (see table VI.6) have been dominated by manufactured goods (especially in the case of Eastern Europe's exports) and fuels, raw materials and semi-manufactured products (especially for the Soviet Union's exports). For the seven countries, finished manufactures account for over 40 per cent in both exports and imports, but more in the latter than the former. Trade in agricultural products and durable consumer goods combined, on the other hand, occupied a comparatively small share (roughly 20 to 30 per cent for exports and 25 to 30 per cent) of overall imports of these countries. Especially low was the share of manufactured consumer goods - about one tenth on both the export and the import sides of the trade equation.

Table VI.5 also lists the composition of exports by main partner groups for four selected years. This shows the marked differences in export patterns by various partner groups; the contrast is even more marked when the data are separated into Eastern Europe and the Soviet Union. The available information illustrates the broad "similarity" in the pattern of exports with CMEA partners and developing countries, especially as concerns the importance of machinery and agricultural products. But the asymmetry in trade with developed market economies, as compared to, say, CMEA partners is substantial. The vast bulk of exports to the latter group consisted of fuels, industrial raw materials and foodstuffs. The share of machinery and durable consumer goods in that trade amounted to roughly one fifth. In contrast, that share in intragroup trade accounted for some 45

to 54 per cent and in trade with developing countries for some 33 to 44 per cent (but the commodity composition of the latter flows, especially on the export side, is notoriously incomplete because of underreporting, as indicated earlier).[41]

A similar asymmetry prevailed on the import side, as shown in table VI.6. Again, there was a broad similarity, but this time chiefly in the composition of intragroup trade and imports from developed market economies, particularly as concerns the relative importance of machinery and fuels and industrial raw materials. Manufactures imported from CMEA accounted for some 50 to 54 per cent of the total in contrast to 29 to 45 per cent for developed market economies. Imports of agricultural products throughout the period claimed a marked share both in imports from developed market economies and especially from the developing countries.

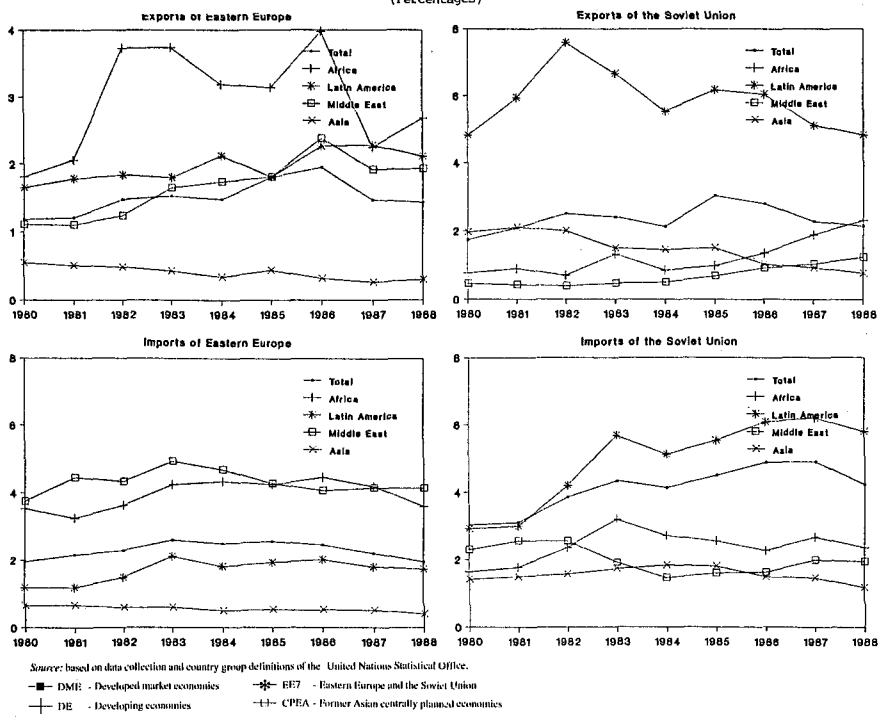
This fundamental asymmetry can be illustrated also by looking at the relative importance of alternative sources of supply in the imports of Eastern Europe and the Soviet Union as well as the major destinations in the export patterns of these countries. The relevant data are organized in table VI.7 for destinations of export supply and table VI.8 for sources of import demand.

## Total level of trade with developing countries

It is useful to look at the trade relationship between the former planned economies of Europe and conventional geographical groups of developing countries (essentially all countries other than the planned economies[42] and developed market economies as per the Statistical Office's classification), if only because that trade was always marginal, rather unstable, heavily concentrated on a few partners and dominated by quite traditional forms of exchange, overwhelmingly manufactures exported by the planned economies in exchange for foodstuffs, fuels and industrial raw materials from developing countries. If anything, recent developments in the global economy and the adjustment problems encountered by the European planned economies further compressed that trade, certainly well below the shares observed in the 1970s, and polarized the exchange of the typical primary goods for manufactures.

The comparatively small share of the developing countries in trade of the former planned economies of Europe can also be seen from the sources of supply and destinations of supply of the developing countries themselves (see figure VI.3). As a share of total exports or imports from the non-CMEA developing countries, Eastern Europe and the Soviet Union accounted for less than 5 per cent of the total. There were considerable variations over time, but the total shares for both Eastern Europe and the Soviet Union somewhat expanded during the earlier part of

Figure VI.3. Eastern Europe and the Soviet Union, share in total exports and imports of developing-country groups, 1980-1988
(Percentages)




[41] A substantial proportion of the omitted items is probably accounted for by exports of sensitive goods (usually related to military hardware or products that could be utilized for that purpose) that, normally, should be added chiefly to the category of investment goods. But it is not clear that trade data of Eastern Europe and the Soviet Union traditionally included *all* arms trade.

[42] This is identical with the "socialist world economic system" minus Cuba, the Lao People's Democratic Republic and Yugoslavia. Yugoslavia has been removed from the developing countries, as explained, but Cuba and the Lao People's Democratic Republic could not be, for lack of data.

Table VI.9. Eastern Europe and the Soviet Union: exports to developing countries, 1975-1988

| Year | World | Total | Africa | Latin America | Middle East | Asia | Year | Africa | Latin America | Middle East | Asia |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Millions of dollars) | | | | | | | (Percentage) | | | |
| | | | | | *Total* | | | | | | |
| 1975 | 77384 | 10207 | 1954 | 2529 | 2543 | 1435 | 1975 | 23.1 | 29.9 | 30.1 | 17.0 |
| 1980 | 155115 | 23171 | 4356 | 5164 | 5829 | 3112 | 1980 | 23.6 | 28.0 | 31.6 | 16.9 |
| 1981 | 156663 | 26727 | 4621 | 5512 | 8052 | 3475 | 1981 | 21.3 | 25.4 | 37.2 | 16.0 |
| 1982 | 165069 | 29158 | 4600 | 6362 | 8051 | 3415 | 1982 | 20.5 | 28.4 | 35.9 | 15.2 |
| 1983 | 174846 | 29895 | 4969 | 6640 | 7549 | 3671 | 1983 | 21.8 | 29.1 | 33.1 | 16.1 |
| 1984 | 175010 | 28970 | 4618 | 6785 | 6028 | 3851 | 1984 | 21.7 | 31.9 | 28.3 | 18.1 |
| 1985 | 172196 | 27134 | 4320 | 6908 | 5216 | 3848 | 1985 | 21.3 | 34.0 | 25.7 | 19.0 |
| 1986 | 190078 | 29202 | 4077 | 7940 | 4579 | 3544 | 1986 | 20.2 | 39.4 | 22.7 | 17.6 |
| 1987 | 207826 | 33282 | 4341 | 8386 | 5179 | 4316 | 1987 | 19.5 | 37.7 | 23.3 | 19.4 |
| 1988 | 216110 | 33647 | 4078 | 8649 | 5464 | 4404 | 1988 | 18.0 | 38.3 | 24.2 | 19.5 |
| | | | | | *Soviet Union* | | | | | | |
| 1975 | 33310 | 6165 | 797 | 1782 | 1039 | 802 | 1975 | 18.0 | 40.3 | 23.5 | 18.1 |
| 1980 | 76449 | 14106 | 1380 | 3679 | 2210 | 2127 | 1980 | 14.7 | 39.2 | 23.5 | 22.6 |
| 1981 | 79003 | 15804 | 1631 | 3956 | 2941 | 2411 | 1981 | 14.9 | 36.2 | 26.9 | 22.0 |
| 1982 | 86912 | 18316 | 1816 | 4703 | 2994 | 2485 | 1982 | 15.1 | 39.2 | 25.0 | 20.7 |
| 1983 | 91343 | 18733 | 2131 | 4841 | 2107 | 2732 | 1983 | 18.0 | 41.0 | 17.8 | 23.1 |
| 1984 | 91649 | 18086 | 1778 | 5020 | 1430 | 3024 | 1984 | 15.8 | 44.6 | 12.7 | 26.9 |
| 1985 | 87201 | 16059 | 1620 | 5123 | 1411 | 2976 | 1985 | 14.6 | 46.0 | 12.7 | 26.7 |
| 1986 | 97335 | 18375 | 1372 | 5966 | 1307 | 2609 | 1986 | 12.2 | 53.0 | 11.6 | 23.2 |
| 1987 | 107873 | 22241 | 1686 | 6498 | 1669 | 3188 | 1987 | 12.9 | 49.8 | 12.8 | 24.4 |
| 1988 | 110559 | 22331 | 1611 | 6664 | 1734 | 3291 | 1988 | 12.1 | 50.1 | 13.0 | 24.7 |
| | | | | | *Eastern Europe* | | | | | | |
| 1975 | 44074 | 4042 | 1157 | 747 | 1504 | 633 | 1975 | 28.6 | 18.5 | 37.2 | 15.7 |
| 1980 | 78666 | 9065 | 2976 | 1485 | 3619 | 985 | 1980 | 32.8 | 16.4 | 39.9 | 10.9 |
| 1981 | 77660 | 10923 | 2990 | 1556 | 5111 | 1064 | 1981 | 27.9 | 14.5 | 47.7 | 9.9 |
| 1982 | 78157 | 10842 | 2784 | 1659 | 5057 | 930 | 1982 | 26.7 | 15.9 | 48.5 | 8.9 |
| 1983 | 83503 | 11162 | 2838 | 1799 | 5442 | 939 | 1983 | 25.8 | 16.3 | 49.4 | 8.5 |
| 1984 | 83361 | 10884 | 2840 | 1765 | 4598 | 827 | 1984 | 28.3 | 17.6 | 45.8 | 8.2 |
| 1985 | 84995 | 11075 | 2700 | 1785 | 3805 | 872 | 1985 | 29.5 | 19.5 | 41.5 | 9.5 |
| 1986 | 92743 | 10827 | 2705 | 1974 | 3272 | 935 | 1986 | 30.4 | 22.2 | 36.8 | 10.5 |
| 1987 | 99953 | 11041 | 2655 | 1888 | 3510 | 1128 | 1987 | 28.9 | 20.6 | 38.2 | 12.3 |
| 1988 | 105551 | 11316 | 2467 | 1985 | 3730 | 1113 | 1988 | 26.5 | 21.4 | 40.1 | 12.0 |

*Source:* Based on data collection and country-group definitions of the Statistical Office of the United Nations Secretariat.

the 1980s, especially in the case of Eastern Europe, but they marginally declined later on. If export shares are low, the corresponding import proportions are even smaller, although there are noticeable variations from the export patterns. The highest shares registered are for imports into Africa (especially Eastern Europe), Latin America (only the Soviet Union) and the Middle East (mainly Eastern Europe). As a share of imports into the Asian developing countries, Eastern Europe and the Soviet Union remained marginal.

Any effort to seek to distribute trade, especially exports, from the former planned economies of Europe to various groups of developing countries runs into formidable information obstacles, particularly underreporting. Because of the nature of the construction of the trade matrices by the Statistical Office, data are "forced" to dovetail. This does not mean, however, that the Statistical Office data capture all trade accurately. Yet, they can be used as a rough indication of changes over time.

In recent years, the former planned economies of Europe combined concentrated their merchandising efforts in developing countries, especially in exports, in particular in countries of Latin America and the Middle East (see table VI.9 for exports and table VI.10 for imports[43]). The share of Africa declined from under one fourth of exports with developing countries in the late 1970s and early 1980s, to less than one fifth, and Asia's share hovered around one fifth throughout most of the period. The data also illustrate the sizeable differences in importance of the various developing-country groups in the trade of the Soviet Union and Eastern Europe separately (and indeed individual Eastern European countries, if complete data coverage could be ensured). Thus, for the Soviet Union, the bulk of its identified exports to developing countries in recent years went to Asia and Latin America. For Eastern Europe, however, the vast bulk of exports went to developing countries, as identified, of Africa and the Middle East, with both Asia and Latin America accounting

[43] The totals reported here are the totals reported by Eastern Europe and the Soviet Union. However, the shares of the regional groups are calculated against the sum of the reported regional totals. Note that for exports the latter values are much smaller than the reported totals for all developing countries (for example, in 1988 only 67 per cent). Because of the construction of the Statistical Office's trade matrix, and perhaps some data-entry errors, several total import values are smaller than the sum of the components! For ease of computations, all summed totals were, therefore, utilized for computing the shares.

Table VI.10. Eastern Europe and the Soviet Union: imports from developing countries, 1975-1988

| Year | World | Total | Africa | Latin America | Middle East | Asia | Year | Africa | Latin America | Middle East | Asia |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (Millions of dollars) | | | | | | (Percentage) | | |
| | | | | | | *Total* | | | | | |
| 1975 | 82137 | 8703 | 2032 | 3839 | 1499 | 1333 | 1975 | 23.3 | 44.1 | 17.2 | 15.3 |
| 1980 | 143907 | 16306 | 2450 | 6972 | 3330 | 3554 | 1980 | 15.0 | 42.8 | 20.4 | 21.8 |
| 1981 | 144009 | 18001 | 2282 | 8633 | 3119 | 3958 | 1981 | 12.7 | 48.0 | 17.3 | 22.0 |
| 1982 | 144938 | 19120 | 2972 | 9850 | 2546 | 3748 | 1982 | 15.5 | 51.5 | 13.3 | 19.6 |
| 1983 | 148979 | 17820 | 3060 | 9040 | 2629 | 3086 | 1983 | 17.2 | 50.7 | 14.8 | 17.3 |
| 1984 | 148316 | 16969 | 2553 | 8647 | 2494 | 3271 | 1984 | 15.0 | 51.0 | 14.7 | 19.3 |
| 1985 | 151672 | 22523 | 2449 | 8722 | 2618 | 3484 | 1985 | 14.2 | 50.5 | 15.2 | 20.2 |
| 1986 | 169831 | 19860 | 2503 | 7157 | 2634 | 2642 | 1986 | 16.8 | 47.9 | 17.6 | 17.7 |
| 1987 | 179938 | 18816 | 2152 | 7214 | 2518 | 3039 | 1987 | 14.4 | 48.3 | 16.9 | 20.4 |
| 1988 | 192427 | 20793 | 2763 | 7638 | 2757 | 3390 | 1988 | 16.7 | 46.2 | 16.7 | 20.5 |
| | | | | | | *Soviet Union* | | | | | |
| 1975 | 35170 | 5566 | 1025 | 2981 | 693 | 868 | 1975 | 18.4 | 53.5 | 12.4 | 15.6 |
| 1980 | 61924 | 9701 | 733 | 5196 | 988 | 2784 | 1980 | 7.6 | 53.6 | 10.2 | 28.7 |
| 1981 | 65976 | 11402 | 699 | 6642 | 872 | 3189 | 1981 | 6.1 | 58.3 | 7.6 | 28.0 |
| 1982 | 68784 | 12043 | 475 | 7932 | 613 | 3023 | 1982 | 3.9 | 65.9 | 5.1 | 25.1 |
| 1983 | 69120 | 10905 | 801 | 7120 | 587 | 2397 | 1983 | 7.3 | 65.3 | 5.4 | 22.0 |
| 1984 | 68390 | 10012 | 543 | 6256 | 567 | 2645 | 1984 | 5.4 | 62.5 | 5.7 | 26.4 |
| 1985 | 70121 | 14151 | 591 | 6746 | 723 | 2695 | 1985 | 5.5 | 62.7 | 6.7 | 25.1 |
| 1986 | 72479 | 11744 | 642 | 5209 | 746 | 2025 | 1986 | 7.4 | 60.4 | 8.7 | 23.5 |
| 1987 | 75350 | 11457 | 985 | 4996 | 894 | 2366 | 1987 | 10.7 | 54.1 | 9.7 | 25.6 |
| 1988 | 83729 | 12486 | 1282 | 5318 | 1085 | 2447 | 1988 | 12.7 | 52.5 | 10.7 | 24.2 |
| | | | | | | *Eastern Europe* | | | | | |
| 1975 | 46967 | 3137 | 1007 | 858 | 806 | 465 | 1975 | 32.1 | 27.4 | 25.7 | 14.8 |
| 1980 | 81983 | 6605 | 1717 | 1776 | 2342 | 770 | 1980 | 26.0 | 26.9 | 35.5 | 11.7 |
| 1981 | 78033 | 6599 | 1583 | 1991 | 2247 | 769 | 1981 | 24.0 | 30.2 | 34.1 | 11.7 |
| 1982 | 76154 | 7077 | 2497 | 1918 | 1933 | 725 | 1982 | 35.3 | 27.1 | 27.3 | 10.3 |
| 1983 | 79859 | 6915 | 2259 | 1920 | 2042 | 689 | 1983 | 32.7 | 27.8 | 29.6 | 10.0 |
| 1984 | 79926 | 6957 | 2010 | 2391 | 1927 | 626 | 1984 | 28.9 | 34.4 | 27.7 | 9.0 |
| 1985 | 81551 | 8372 | 1858 | 1976 | 1895 | 789 | 1985 | 28.5 | 30.3 | 29.1 | 12.1 |
| 1986 | 97352 | 8116 | 1861 | 1948 | 1888 | 617 | 1986 | 29.5 | 30.9 | 29.9 | 9.8 |
| 1987 | 104588 | 7359 | 1167 | 2218 | 1624 | 673 | 1987 | 20.5 | 39.0 | 28.6 | 11.8 |
| 1988 | 108698 | 8307 | 1481 | 2320 | 1672 | 943 | 1988 | 23.1 | 36.2 | 26.1 | 14.7 |

*Source:* Based on data collection and country-group definitions of the Statistical Office of the United Nations Secretariat.

for far smaller shares of exports.

Table VI.10 illustrates the same geographical distribution for imports. As could be anticipated, for recent years, the major sources of import supply for the former planned economies of Europe from developing countries were Asia and Latin America (adding up to roughly three fourths to four fifths of total imports), but with noticeable variations over time, probably owing to the fluctuating role of imported grains into the USSR. For the Soviet Union, by far the most important supplier was Latin America (owing to the inclusion of Cuba and imports of grain from Latin America, notably Argentina). The Middle East, on the other hand, remained a small source of imports - about one tenth at best of the total from all developing countries. The rise in the share of Africa is to be stressed, owing largely to the re-exporting of oil from the Libyan Arab Jamahiriya. In the case of Eastern Europe, imports were more evenly spread over the country groups, except Asia, which accounted for about 10 per cent of total imports from developing countries. But there were considerable fluctuations over time.

Another way of looking at the various developing-country data elaborated upon in the preceding paragraphs is by estimating the share of the former planned economies of Europe in the trade of the various developing-country groupings. Table VI.11[44] portrays the composition of trade of Eastern Europe and the Soviet Union, separately and combined, with the four major developing-country groups according to the SITC breakdown. The same is done for imports from these various developing-country groups in table VI.12.[45]

Regarding Soviet exports, there were major differences in the composition of exports as between Africa and the Middle East, on the one hand, and Asia and Latin America, on the other. This is most apparent in the relative importance of agricultural products, fuels and machinery. By the end of the 1980s, the dominant positions in Soviet exports were taken up by fuels and machinery, which together accounted for some 50 to 70 per cent.

The commodity composition of imports (see table VI.12) of either the Soviet Union or Eastern Europe from the developing-

[44] As noted in connection with tables VI.9 and VI.10, the totals utilized for computing the shares are simply the sums of the reported commodity group values. Note that for exports these values are much smaller than the reported totals. See footnote 43.

[45] For this table, also, the total utilized are the sums of the reported commodity group values.

Table VI.11. Eastern Europe and the Soviet Union: commodity composition of exports by developing country groups, 1975-1988
(Percentage)

| | Total | | | | Soviet Union | | | | Eastern Europe | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Africa | Latin America | Middle East | Asia | Africa | Latin America | Middle East | Asia | Africa | Latin America | Middle East | Asia |
| *1975* | | | | | | | | | | | | |
| SITC 0+1 | 15.4 | 15.4 | 8.7 | 15.2 | 8.8 | 17.1 | 0.8 | 23.8 | 19.3 | 11.7 | 13.1 | 5.2 |
| SITC 2+4 | 7.8 | 6.6 | 6.1 | 3.2 | 14.6 | 8.6 | 10.0 | 4.4 | 3.8 | 2.1 | 4.0 | 1.9 |
| SITC 3 | 9.8 | 23.4 | 1.0 | 15.6 | 23.9 | 29.5 | 1.8 | 24.5 | 1.3 | 10.3 | 0.6 | 5.4 |
| SITC 5 | 5.9 | 5.7 | 5.5 | 20.7 | 1.0 | 4.0 | 5.0 | 12.0 | 8.8 | 9.2 | 5.8 | 30.8 |
| SITC 6+8 | 24.6 | 15.2 | 23.3 | 14.5 | 16.6 | 11.2 | 9.5 | 8.1 | 29.4 | 23.9 | 31.2 | 21.8 |
| SITC 7 | 36.5 | 33.8 | 55.3 | 30.7 | 35.0 | 29.6 | 72.9 | 27.1 | 37.4 | 42.8 | 45.3 | 34.8 |
| *1980* | | | | | | | | | | | | |
| SITC 0+1 | 14.1 | 10.4 | 10.2 | 2.9 | 4.3 | 10.5 | 0.8 | 2.5 | 17.8 | 10.2 | 14.0 | 3.9 |
| SITC 2+4 | 8.0 | 6.6 | 4.1 | 3.4 | 10.6 | 8.4 | 5.1 | 3.4 | 7.1 | 2.4 | 3.6 | 3.5 |
| SITC 3 | 4.5 | 22.8 | 8.7 | 38.8 | 14.4 | 28.6 | 24.0 | 57.9 | 0.8 | 9.7 | 2.6 | 0.2 |
| SITC 5 | 7.8 | 6.8 | 5.7 | 13.7 | 3.4 | 4.1 | 3.2 | 3.9 | 9.5 | 13.0 | 6.7 | 33.3 |
| SITC 6+8 | 20.8 | 11.8 | 25.5 | 9.2 | 3.8 | 9.1 | 10.1 | 3.0 | 27.3 | 18.1 | 31.7 | 21.5 |
| SITC 7 | 44.6 | 41.6 | 45.8 | 32.0 | 63.6 | 39.3 | 56.8 | 29.2 | 37.5 | 46.7 | 41.4 | 37.6 |
| *1985* | | | | | | | | | | | | |
| SITC 0+1 | 16.6 | 6.9 | 13.1 | 2.6 | 4.9 | 8.3 | 0.7 | 1.7 | 22.5 | 3.3 | 16.7 | 5.2 |
| SITC 2+4 | 10.0 | 6.4 | 7.6 | 1.2 | 7.6 | 6.6 | 4.0 | 0.7 | 11.1 | 5.8 | 8.6 | 2.9 |
| SITC 3 | 11.5 | 31.0 | 5.6 | 39.6 | 29.4 | 39.4 | 20.2 | 50.1 | 2.5 | 10.0 | 1.4 | 9.2 |
| SITC 5 | 4.8 | 15.2 | 9.6 | 8.3 | 3.0 | 4.0 | 9.2 | 2.1 | 5.7 | 43.2 | 9.8 | 26.3 |
| SITC 6+8 | 20.8 | 11.3 | 18.7 | 9.9 | 4.5 | 11.4 | 5.6 | 2.8 | 28.9 | 11.1 | 22.5 | 30.6 |
| SITC 7 | 36.5 | 29.3 | 45.3 | 38.3 | 50.6 | 30.3 | 60.3 | 42.6 | 29.4 | 26.7 | 41.1 | 25.9 |
| *1988* | | | | | | | | | | | | |
| SITC 0+1 | 12.9 | 7.4 | 10.5 | 2.9 | 8.2 | 7.3 | 1.1 | 1.9 | 15.6 | 7.5 | 14.1 | 5.2 |
| SITC 2+4 | 6.2 | 5.7 | 7.5 | 2.6 | 2.0 | 6.5 | 3.6 | 1.2 | 8.6 | 3.5 | 9.0 | 5.9 |
| SITC 3 | 9.0 | 26.6 | 8.2 | 25.4 | 18.7 | 32.9 | 24.9 | 35.1 | 3.2 | 8.2 | 1.9 | 1.9 |
| SITC 5 | 5.2 | 12.4 | 10.4 | 13.3 | 2.6 | 4.2 | 5.2 | 5.5 | 6.7 | 36.1 | 12.4 | 31.8 |
| SITC 6+8 | 23.3 | 11.7 | 20.5 | 12.3 | 9.4 | 11.1 | 6.2 | 5.3 | 31.5 | 13.3 | 25.9 | 29.0 |
| SITC 7 | 43.5 | 36.3 | 42.8 | 43.6 | 59.0 | 38.0 | 58.9 | 50.8 | 34.4 | 31.4 | 36.7 | 26.1 |

*Source:* Based on data collection and country group definitions of the Statistical Office of the United Nations Secretariat.

country regions differs considerably from exports. Perhaps the most striking feature is the negligible share of machinery in imports from any region. It was highest for imports from Asian developing countries, for which it reached over 8 per cent for Eastern Europe in 1988 and not quite 4 per cent for the Soviet Union. In fact, manufactures as a whole accounted for a very small, albeit a rising, share for Africa and the Middle East, but a declining one for Asia and Latin America. Foodstuffs and non-food raw materials constituted the vast bulk of imports from any country group, except fuels in the case of Middle East. But it is worth noting the sharp decline thereof and, in the case of Eastern Europe, the rapid increase in the share of fuels particularly from Africa.

## Analytically more meaningful groupings

An analytically more meaningful grouping of developing countries, certainly one that is more useful in assessing the impact of events in the East and in the East-West framework on developing countries, comprises at least four categories. One criterion would be countries that maintained very close ties to the former planned economies of Europe. These are, in particular, the three full members of CMEA;[46] the eight developing countries with some cooperant status in CMEA;[47] and a group of developing countries that have traditionally maintained close ties with Eastern Europe and the Soviet Union for political, ideological, military or other reasons.[48] In addition, it may be of interest to examine the trade relations with a group of NIEs.[49]

[46] Note that Mongolia became a full CMEA member in 1962, Cuba in 1972 and Viet Nam in 1978. Moreover, whereas Mongolia has been a socialist country from the beginning of the world socialist system and Viet Nam (it being, of course, the Democratic Republic of Vietnam until 1975) became a member after it gained independence in 1954, Cuba joined that rank only in 1962, after the direction of its societal revolution turned towards an alliance with the socialist countries.

[47] The agreements on cooperant status with these countries were signed between 1973 and 1987. This circumstance will be ignored, as the "special" relationship in most cases (certainly for Afghanistan, Angola, Iraq, Mozambique and Democratic Yemen - since 1990 again Yemen) already existed, albeit perhaps in a somewhat less formal format, prior to the signing of the CMEA cooperant agreement. But it may be useful just the same to bear this particular feature in mind when analysing the data. Note that data for Mozambique are too incomplete to be included for analysis. Also some other adjustments to the country group had to be enacted. The exceptions are noted in tables VI.13 and VI.14.

[48] As identified earlier, this group includes relations with Algeria, Cambodia, Egypt, India, the Islamic Republic of Iran, Morocco, Pakistan and the Syrian Arab Republic, with some modifications to accommodate the data, as noted in tables VI.13 and VI.14.

[49] As related earlier, the group retained here includes Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. For some other potentially interesting NIEs either no data or too sketchy data, are available, and so these countries had to be ignored. Note that the group had to be adjusted to reflect gaps in the data (as documented in tables VI.13 and VI.14).

Table VI.12. Eastern Europe and the Soviet Union: commodity composition of imports by developing country groups, 1975-1988
(Percentage)

| | Total | | | | Soviet Union | | | | Eastern Europe | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Africa | Latin America | Middle East | Asia | Africa | Latin America | Middle East | Asia | Africa | Latin America | Middle East | Asia |
| *1975* | | | | | | | | | | | | |
| SITC 0+1 | 30.8 | 84.9 | 9.9 | 28.2 | 44.8 | 88.7 | 12.8 | 29.6 | 16.6 | 71.5 | 7.3 | 25.3 |
| SITC 2+4 | 37.4 | 10.9 | 14.8 | 30.2 | 23.2 | 9.2 | 16.9 | 26.5 | 51.8 | 16.9 | 13.0 | 37.1 |
| SITC 3 | 11.3 | 0.1 | 67.5 | 5.1 | 1.4 | 0.0 | 60.8 | 6.9 | 21.4 | 0.5 | 73.3 | 1.7 |
| SITC 5 | 3.2 | 1.0 | 2.2 | 2.4 | 5.1 | 0.8 | 2.9 | 3.5 | 1.4 | 1.5 | 1.6 | 0.4 |
| SITC 6+8 | 16.7 | 3.1 | 5.5 | 32.2 | 25.1 | 1.2 | 6.6 | 31.1 | 8.2 | 9.7 | 4.5 | 34.1 |
| SITC 7 | 0.4 | 0.0 | 0.1 | 2.0 | 0.4 | 0.0 | 0.0 | 2.3 | 0.5 | 0.0 | 0.2 | 1.3 |
| *1980* | | | | | | | | | | | | |
| SITC 0+1 | 33.5 | 78.7 | 11.1 | 27.3 | 65.2 | 84.3 | 14.0 | 30.0 | 19.9 | 62.5 | 9.9 | 17.0 |
| SITC 2+4 | 19.8 | 16.6 | 10.5 | 32.2 | 13.0 | 13.8 | 14.0 | 28.4 | 22.7 | 24.6 | 9.1 | 46.7 |
| SITC 3 | 37.6 | 0.2 | 73.9 | 6.5 | 0.0 | 0.2 | 63.5 | 8.1 | 53.6 | 0.1 | 78.3 | 0.1 |
| SITC 5 | 2.4 | 0.4 | 1.0 | 3.9 | 5.0 | 0.2 | 1.6 | 4.8 | 1.3 | 1.0 | 0.7 | 0.4 |
| SITC 6+8 | 6.8 | 4.1 | 3.5 | 28.3 | 16.8 | 1.4 | 7.0 | 26.8 | 2.5 | 11.7 | 2.0 | 34.1 |
| SITC 7 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 1.7 | 0.1 | 0.1 | 0.0 | 1.6 |
| *1985* | | | | | | | | | | | | |
| SITC 0+1 | 22.7 | 73.3 | 5.5 | 24.9 | 56.0 | 77.1 | 13.2 | 24.4 | 12.1 | 59.9 | 2.6 | 26.6 |
| SITC 2+4 | 17.2 | 15.4 | 9.1 | 25.2 | 16.7 | 14.5 | 13.7 | 21.4 | 17.4 | 18.7 | 7.4 | 38.9 |
| SITC 3 | 49.8 | 6.1 | 75.3 | 6.8 | 0.0 | 6.3 | 44.2 | 8.6 | 65.6 | 5.1 | 87.2 | 0.1 |
| SITC 5 | 3.4 | 0.5 | 2.9 | 4.5 | 9.6 | 0.2 | 9.8 | 5.7 | 1.4 | 1.9 | 0.3 | 0.5 |
| SITC 6+8 | 6.8 | 3.6 | 6.8 | 32.5 | 17.7 | 1.8 | 18.0 | 32.9 | 3.3 | 10.3 | 2.5 | 30.8 |
| SITC 7 | 0.1 | 1.0 | 0.3 | 6.1 | 0.0 | 0.1 | 1.1 | 6.9 | 0.2 | 4.2 | 0.0 | 3.1 |
| *1988* | | | | | | | | | | | | |
| SITC 0+1 | 19.6 | 77.8 | 10.6 | 24.5 | 30.4 | 77.4 | 12.0 | 24.8 | 10.2 | 78.8 | 9.7 | 23.8 |
| SITC 2+4 | 19.8 | 11.4 | 12.4 | 25.0 | 8.8 | 11.1 | 14.8 | 23.2 | 29.5 | 12.0 | 10.8 | 29.6 |
| SITC 3 | 27.5 | 6.5 | 57.7 | 6.7 | 10.7 | 8.7 | 34.5 | 9.3 | 42.0 | 1.4 | 72.9 | 0.0 |
| SITC 5 | 8.2 | 0.4 | 6.6 | 1.9 | 10.5 | 0.2 | 15.1 | 2.4 | 6.2 | 1.0 | 1.1 | 0.6 |
| SITC 6+8 | 24.7 | 3.7 | 12.1 | 36.9 | 39.7 | 2.5 | 23.0 | 36.7 | 11.6 | 6.5 | 4.9 | 37.5 |
| SITC 7 | 0.2 | 0.2 | 0.7 | 5.0 | 0.0 | 0.2 | 0.6 | 3.6 | 0.4 | 0.3 | 0.7 | 8.5 |

*Source:* Based on data collection and country group definitions of the Statistical Office of the United Nations Secretariat.

Table VI.13. Eastern Europe and the Soviet Union: exports to selected developing country groups, 1970-1989
(Millions of dollars)

| Year | Total | | | | Soviet Union | | | | Eastern Europe | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CMEA[a] | Cooperants[b] | DEFA[c] | NIEs[d] | CMEA[a] | Cooperants[b] | DEFA[c] | NIEs[d] | CMEA[a] | Cooperants[b] | DEFA[c] | NIEs[d] |
| 1970 | 1300 | 204 | 1361 | 202 | 1028 | 113 | 875 | 79 | 272 | 91 | 486 | 122 |
| 1971 | 1247 | 286 | 1380 | 212 | 1006 | 165 | 842 | 92 | 241 | 121 | 538 | 120 |
| 1972 | 1349 | 287 | 1397 | 281 | 1118 | 166 | 806 | 156 | 230 | 121 | 591 | 125 |
| 1973 | 1755 | 409 | 1718 | 305 | 1443 | 254 | 1097 | 159 | 311 | 155 | 622 | 146 |
| 1974 | 2216 | 638 | 2572 | 486 | 1852 | 347 | 1453 | 233 | 364 | 292 | 1119 | 253 |
| 1975 | 2820 | 924 | 2854 | 581 | 2292 | 499 | 1564 | 199 | 528 | 425 | 1290 | 382 |
| 1976 | 3269 | 995 | 2796 | 760 | 2730 | 617 | 1402 | 218 | 539 | 379 | 1394 | 542 |
| 1977 | 3915 | 1063 | 3465 | 808 | 3342 | 709 | 1820 | 289 | 574 | 354 | 1645 | 519 |
| 1978 | 4891 | 1871 | 3554 | 780 | 4143 | 1401 | 1893 | 223 | 748 | 470 | 1661 | 557 |
| 1979 | 5648 | 2478 | 3896 | 1501 | 4811 | 1827 | 2054 | 533 | 838 | 651 | 1842 | 969 |
| 1980 | 6327 | 2489 | 5358 | 1619 | 5271 | 1508 | 2734 | 630 | 1056 | 981 | 2624 | 988 |
| 1981 | 7030 | 4342 | 6010 | 1564 | 5931 | 2209 | 3297 | 583 | 1099 | 2133 | 2713 | 981 |
| 1982 | 7847 | 4517 | 5990 | 1305 | 6684 | 2350 | 3286 | 543 | 1163 | 2167 | 2704 | 763 |
| 1983 | 8334 | 3153 | 6391 | 1440 | 7130 | 1739 | 3660 | 386 | 1203 | 1414 | 2731 | 1054 |
| 1984 | 8294 | 3245 | 5743 | 1989 | 7076 | 1798 | 3334 | 383 | 1218 | 1447 | 2409 | 1606 |
| 1985 | 8239 | 3260 | 5970 | 1358 | 7409 | 1860 | 3317 | 341 | 830 | 1400 | 2653 | 1017 |
| 1986 | 9726 | 3452 | 4683 | 1171 | 8885 | 2167 | 2668 | 315 | 841 | 1285 | 2015 | 856 |
| 1987 | 10941 | 3644 | 5271 | 1447 | 9991 | 2298 | 3351 | 547 | 951 | 1345 | 1920 | 900 |
| 1988 | 11369 | 3592 | 5739 | 1691 | 10293 | 2380 | 3382 | 548 | 1076 | 1212 | 2357 | 1144 |
| 1989 | 10770 | 2780 | 5648 | 2085 | 9889 | 2127 | 3580 | 842 | 881 | 653 | 2068 | 1243 |

*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

[a] Cuba, Mongolia and Viet Nam.

[b] Afghanistan, Angola, Democratic Yemen, Ethiopia, Iraq, Mexico, and Nicaragua. Data for Mozambique are too sketchy to be included. Data for the German Democratic Republic are not available. Romanian export data for Afghanistan and Nicaragua are too incomplete to be included.

[c] Developing countries with formal arrangements : Algeria, Cambodia, Egypt, India, Islamic Republic of Iran, Morocco, Pakistan and Syrian Arab Republic. Data for the German Democratic Republic are not available. Romanian export data for Cambodia are too incomplete to be included.

[d] Newly industrialized economies: Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Data for the German Democratic Republic are not available. Romanian export data for Hong Kong are too incomplete to be included.

Table VI.14. Eastern Europe and the Soviet Union: imports from selected developing country groups, 1970-1989
(Millions of dollars)

| Year | Total | | | | Soviet Union | | | | Eastern Europe | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CMEA | Cooperants | DEFA | NIEs | CMEA | Cooperants | DEFA | NIEs | CMEA | Cooperants | DEFA | NIEs |
| 1970 | 792 | 47 | 1185 | 345 | 594 | 40 | 783 | 184 | 199 | 7 | 402 | 161 |
| 1971 | 631 | 77 | 1325 | 341 | 424 | 58 | 896 | 186 | 206 | 19 | 430 | 156 |
| 1972 | 540 | 144 | 1605 | 400 | 371 | 124 | 1038 | 210 | 169 | 20 | 567 | 190 |
| 1973 | 1002 | 377 | 1851 | 640 | 747 | 306 | 1233 | 354 | 254 | 71 | 618 | 285 |
| 1974 | 1578 | 645 | 2725 | 927 | 1159 | 444 | 1615 | 513 | 419 | 201 | 1110 | 414 |
| 1975 | 2633 | 713 | 3071 | 1137 | 2245 | 545 | 1854 | 682 | 389 | 168 | 1217 | 455 |
| 1976 | 2687 | 941 | 2700 | 1400 | 2287 | 618 | 1533 | 729 | 401 | 323 | 1167 | 671 |
| 1977 | 3247 | 952 | 3002 | 1444 | 2817 | 561 | 1839 | 573 | 430 | 391 | 1163 | 871 |
| 1978 | 4205 | 1504 | 2572 | 1410 | 3703 | 752 | 1523 | 529 | 503 | 753 | 1049 | 881 |
| 1979 | 4330 | 2159 | 3022 | 2013 | 3754 | 772 | 1570 | 753 | 577 | 1388 | 1452 | 1261 |
| 1980 | 4240 | 2461 | 4643 | 2821 | 3610 | 881 | 2369 | 1231 | 630 | 1583 | 2274 | 1591 |
| 1981 | 4265 | 953 | 5727 | 3147 | 3431 | 521 | 3599 | 1699 | 833 | 433 | 2128 | 1448 |
| 1982 | 5210 | 905 | 6144 | 2164 | 4447 | 478 | 3361 | 1273 | 763 | 436 | 2784 | 891 |
| 1983 | 5223 | 1068 | 5542 | 2332 | 4419 | 944 | 2961 | 1405 | 804 | 124 | 2581 | 927 |
| 1984 | 5998 | 1433 | 5766 | 2276 | 5038 | 1247 | 2749 | 1201 | 960 | 188 | 3017 | 1075 |
| 1985 | 6478 | 1523 | 6158 | 1788 | 5744 | 1126 | 3054 | 1051 | 734 | 399 | 3104 | 737 |
| 1986 | 7022 | 1392 | 4799 | 1545 | 6395 | 916 | 2905 | 833 | 627 | 479 | 1894 | 712 |
| 1987 | 7982 | 2240 | 4891 | 1822 | 7181 | 1737 | 2893 | 922 | 801 | 510 | 1998 | 900 |
| 1988 | 8375 | 2888 | 5630 | 1860 | 7626 | 2092 | 3404 | 840 | 749 | 802 | 2227 | 1020 |
| 1989 | 8454 | 2587 | 7086 | 2851 | 7594 | 1846 | 4850 | 1983 | 859 | 748 | 2236 | 868 |

*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

[a] Cuba, Mongolia and Viet Nam.

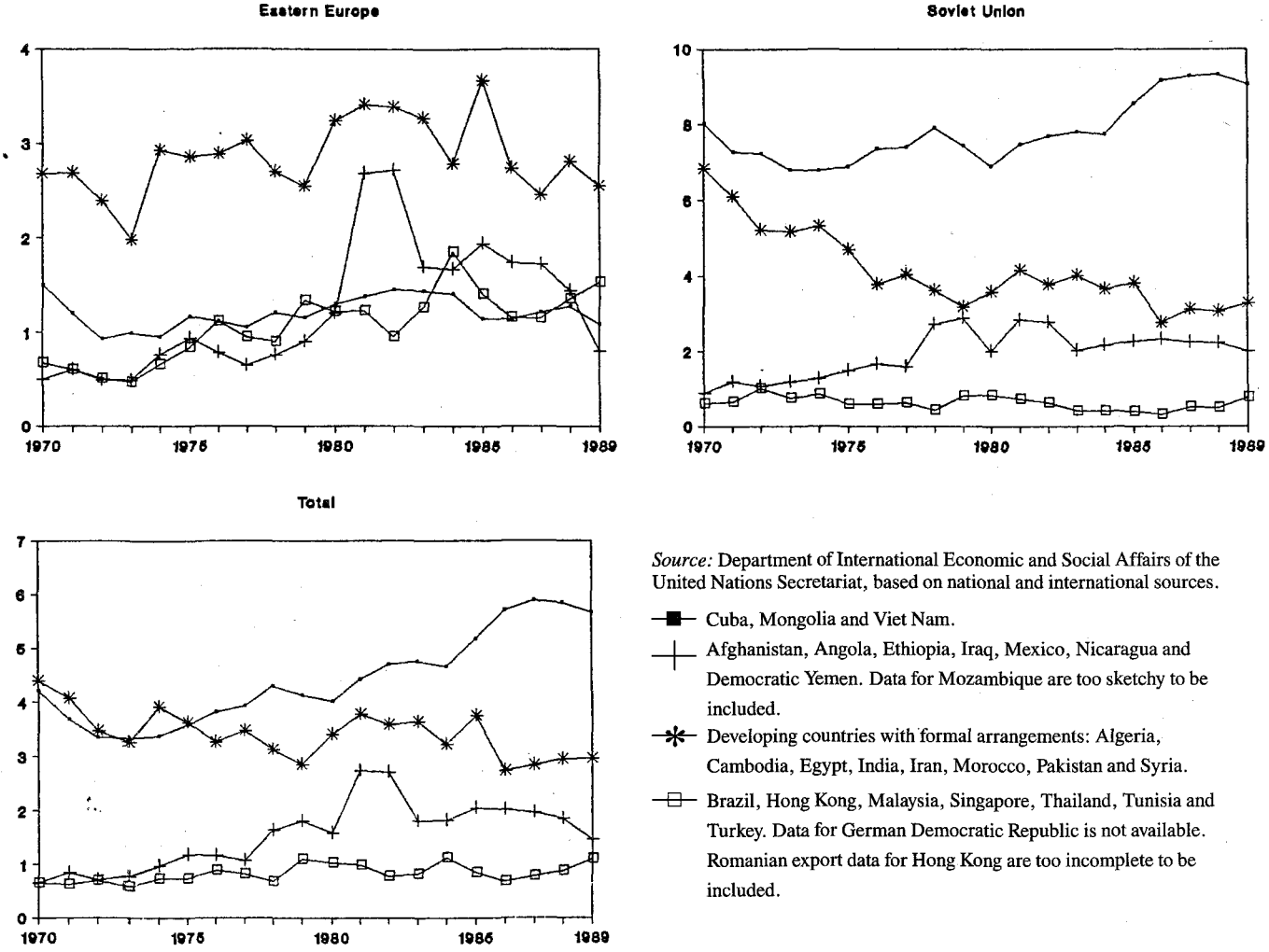
[b] Afghanistan, Angola, Democratic Yemen, Ethiopia, Iraq, Mexico, and Nicaragua. Data for Mozambique are too sketchy to be included. Data for the German Democratic Republic are not available. Romanian export data for Afghanistan and Nicaragua are too incomplete to be included.

[c] Developing countries with formal arrangements : Algeria, Cambodia, Egypt, India, Islamic Republic of Iran, Morocco, Pakistan and Syrian Arab Republic. Data for the German Democratic Republic are not available. Romanian export data for Cambodia are too incomplete to be included.

[d] Newly industrialized economies: Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Data for the German Democratic Republic are not available. Romanian export data for Hong Kong are too incomplete to be included.

Figure VI.4. Eastern Europe and the Soviet Union, geographical distribution of exports to selected developing-country groups, 1970-1989

(Percentages)




*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

Cuba, Mongolia and Viet Nam.

Afghanistan, Angola, Ethiopia, Iraq, Mexico, Nicaragua and Democratic Yemen. Data for Mozambique are too sketchy to be included.

Developing countries with formal arrangements: Algeria, Cambodia, Egypt, India, Iran, Morocco, Pakistan and Syria.

Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Data for German Democratic Republic is not available. Romanian export data for Hong Kong are too incomplete to be included.

There are still questions of critical importance in evaluating the impact of events in the East on these developing countries that cannot be satisfactorily answered for lack of adequate data. The standardized statistics of the Statistical Office simply do not permit basic documentation for these groups. The CMEA's statistics help in considering some groups, but not others. Finally, owing to the incomplete statistical reporting, especially of bilateral trade statistics, with these selected developing countries and numerous problems with the evaluation of the national data that are available, it is impossible to rely extensively on national statistical sources, except when other information is simply not available at all. In what follows, then, commercial and financial relations will be documented to the extent that available information permits assessment.

Tables VI.13 and VI.14 show the values of exports to and imports from these special four groups and the former planned economies of Europe. Graphic presentations of the shares of the four groups in total exports and imports of the former planned economies of Europe, and separately for Eastern Europe and the Soviet Union, are in figures VI.4 and VI.5, respectively. The data illustrate that the trade with the three developing-country full CMEA partners remained of marginal importance to Eastern Europe proper (about 1 per cent for both exports and imports), but not to the Soviet Union (in recent years, about 9 per cent of exports and 7 per cent of imports). Furthermore, the share of these countries in trade of the former planned economies of Europe, almost exclusively because of the Soviet Union, steadily increased. This may suggest that developing countries were obtaining less net resource transfers through trade than before. Also, the share of exports consistently exceeded the share of imports, suggesting resource transfers to these selected developing countries.

Though the participation rates of these CMEA developing countries in the trade of the former planned economies of Europe remained small, that trade was of critical significance to the three countries. Thus, during the 1980s, the share of CMEA in total exports of Cuba ranged between 65 and 87 per cent, for Mongolia between 92 and 93.5 per cent and for Viet Nam between 41[50] and 66 per cent; the corresponding import data are 76 and 86 per cent for Cuba, 93 and 98 per cent for Mongolia and 56 and 79 per cent for Viet Nam.[51] Although detailed commodity group statistics are not available, there is little doubt that the asymmetry in trade noted for all developing countries was even more pronounced for relations between the European and other CMEA countries, given the latter's need for capital goods to pursue fairly rapid industrialization and ability to supply raw materials and foodstuffs in particular.

Although the share of the three developing-country CMEA members in the trade of the partners of the European CMEA remained small, during the 1980s these countries found an expanding market for their products in Eastern Europe and the Soviet Union, and their market shares in fact rose. This cannot be fully attributed to these countries having become CMEA members. But the trade statistics tend to support the proposition that CMEA membership improved the intragroup trade prospects of these countries.

Tables IV.13 and VI.14 also show the values of trade of the cooperants with the former planned economies of Europe (excluding data for the German Democratic Republic);[52] the corresponding shares are graphed in figures VI.4 for exports and VI.5 for imports. The share of these countries in the total exports and imports of the former planned economies of Europe was rather unstable, fluctuating between 1 and 2.5 per cent of exports and 1 to 1.5 per cent of imports, but expanding after the signing of the cooperant agreements; before that occurred, the shares fluctuated around 1 per cent. In fact, especially at the time that Eastern Europe pushed its exports in the early 1980s, the share of these developing countries more than doubled. There was some gain also on the import side, except for Eastern Europe in recent years, but to a far smaller degree than for exports. This by itself suggests the presence of export surpluses for both the Soviet Union and Eastern Europe.

The importance of the European partners in the trade of these cooperants was probably much smaller, and very much smaller in the case of individual cooperants (such as Mexico) than in the case of the three CMEA developing countries, but it must have been significant just the same for most of these countries. As regards the commodity composition, fragmentary data suggest that the vast bulk of trade remained consistent with the overall features of trade between the European CMEA and developing countries, with the former's exports composed mainly of manufactured goods, chiefly machinery, and imports mostly of fuels and raw materials.

Summing up, there would appear to be some *prima facie* evidence that the developing countries that maintained some formal relationship with CMEA derived benefits in terms of gaining a larger position especially in the exports of the European members and perhaps also in the transfer of assistance or credits, on which more later. But there is simply not enough information available to attribute these developments unambiguously to these countries having become associated with CMEA. None the less, some formalized form of association with CMEA would appear to have improved the trade prospects of these countries in CMEA.

Regarding the evolution of trade of the other groups (see tables VI.13 and VI.14 for absolute values of and figures VI.4 and VI.5 for shares in exports and imports, respectively), the selected developing countries with close ties to the former planned economies of Europe but without formal links to CMEA accounted for about 3 to 5 per cent of exports and imports (3 to 6 per cent for the Soviet Union). Whereas the share

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[50] This was attained only in 1989, when a significant export push to convertible-currency countries was launched in the context of *doi moi*, Viet Nam's version of restructuring. Without that observation, the range was between 52 and 66 per cent.

[51] All data are from *Vneshnyaya torgovlya stran-chlenov...*, pp. 38-39 and 45.

[52] Because for several countries of any of the more analytical developing-country groups no data can be estimated for the period since 1975, the partial data available for the German Democratic Republic were simply omitted from the computations. This is regrettable as that country's share in CMEA trade with the eight cooperants was rather substantial in the 1960s and early 1970s; there is no reason to suspect that more recent trends deviated substantially from the earlier experience. For a recent analysis, see Siegfried Schultz, "Characteristics of East Germany's third world policy: aid and trade", *Konjunkturpolitik*, No. 5 (1990), pp. 309-28. Some adjustments had to be made for other reporters as well, as noted in the tables.

of these countries in Soviet trade declined sharply from their highs in the early 1970s, in Eastern Europe's trade it rose slightly, after a precipitous decline for imports in the late 1970s. Again, export shares tend to exceed import shares, except in recent years, offering *prima facie* evidence of resource transfers to this group of developing countries.

Finally, as concerns trade of the former planned economies of Europe with the NIEs, their share in Soviet trade remained paltry - below 1 per cent for Soviet and 2 per cent for Eastern Europe's exports, and about 2 per cent for Soviet and slightly above 1 per cent for Eastern Europe's imports. No data are available on the commodity composition of trade with either the selected eight developing countries without a formal CMEA status or the group of NIEs.

### Financial interactions with developed market economies

Comprehensive statistics on the international financial flows of the former planned economies of Europe are simply not available. In what follows, use is made of data with a varying degree of coverage, comprehensiveness and reliability.

As regards links between the countries in transition and the developed market economies, there are three main sources of financial interaction. One is the borrowing in financial markets that Eastern Europe and the Soviet Union conducted, especially during the past two decades. In some cases, these countries have also lent funds to developed market economies, either directly or through participations in consortial arrangements. On the whole, however, such involvements have remained rather small. But all extended substantial loans to selected developing countries, usually in the context of development assistance.

In addition to borrowing and lending in financial markets, all countries have tried to attract foreign direct investment through joint ventures or other forms of foreign involvement. Yugoslavia started the trend in the mid-1960s. In 1972, Hungary emulated it and thereby set off the process of joint-venture legislation throughout Eastern Europe and the Soviet Union, and lately also Albania. Finally, especially with the emergence of broad-based reforms since mid-1989, various kinds of financial and other assistance have been rendered to the more radically reforming Eastern countries.

As regards borrowing in commercial markets, the total gross debt of Eastern Europe[53] rose from $5.6 billion in 1970 to some $80 billion in 1980; after some reduction in 1983/84, to $90 billion in 1985; and some $153 billion in 1990 (see figure VI.6). Estimates of net debt (that is, gross minus convertible-currency assets held in Western money markets) suggest that net debt rose from $3.7 billion in 1970 to some $65 billion in 1980, $69 billion in 1985 and some $129 billion in 1990.[54] Whereas during most of the 1970s and early 1980s the key borrowers were Hungary, Poland and Romania, in recent years a substantial proportion of the rising debt has been on account of Bulgaria, Hungary and especially the Soviet Union.

Most of these loans used to be raised in Euromarkets, where the provenance of funds is not exactly recorded; more recently, there has been a drift towards greater official and government-guaranteed loans (see chapter IV). There is little doubt, however, that the major lenders to Eastern Europe and the Soviet Union have been France, Germany, Italy and the United Kingdom. Smaller, but still important, sums have also been mobilized in Japan, the United States and some oil-exporting countries of the Middle East.

Throughout the borrowing episodes and the global financial crunch of the 1980s, all substantial borrowers in Eastern Europe (except Czechoslovakia, which borrowed comparatively little), as well as Yugoslavia, experienced difficulties in orderly servicing of their foreign debt. Two, Bulgaria and Poland, declared a formal moratorium on debt-servicing; Poland did so in August 1981 before the Mexican crisis set off the world-wide financial crunch. Also Romania was forced into formally rescheduling its debt in 1982. It did so in conjunction with a commitment to repay all of its debt as rapidly as possible.

The situation was perhaps easiest to cope with for the former German Democratic Republic, owing to its traditional special relationship with the Federal Republic of Germany, Hungary, Poland and Romania, in particular, have been battling the after-effects of substantial borrowing, especially during the 1970s, for managing economic policy. Romania worked off most of its foreign debt through a wrenching austerity programme implemented during most of the 1980s. Bulgaria quickly overcame its first external-payments crisis in the late 1970s, essentially by re-exporting oil acquired for transferable roubles at below market prices (because of the CMEA price formula, as explained earlier) to convertible-currency markets. It then maintained a comparatively low borrowing profile in the early 1980s, in part because of its decision to redirect most of its trade to CMEA partners. However, policy makers once again lost control over external balances in the late 1980s, a situation that led in March 1990 to the declaration of a debt moratorium, which was extended in June also to interest payments. Hungary has continued to struggle with its external debt. Yet, policy makers still place a high priority on the orderly servicing of the debt to preserve the country's standing in the international financial community.

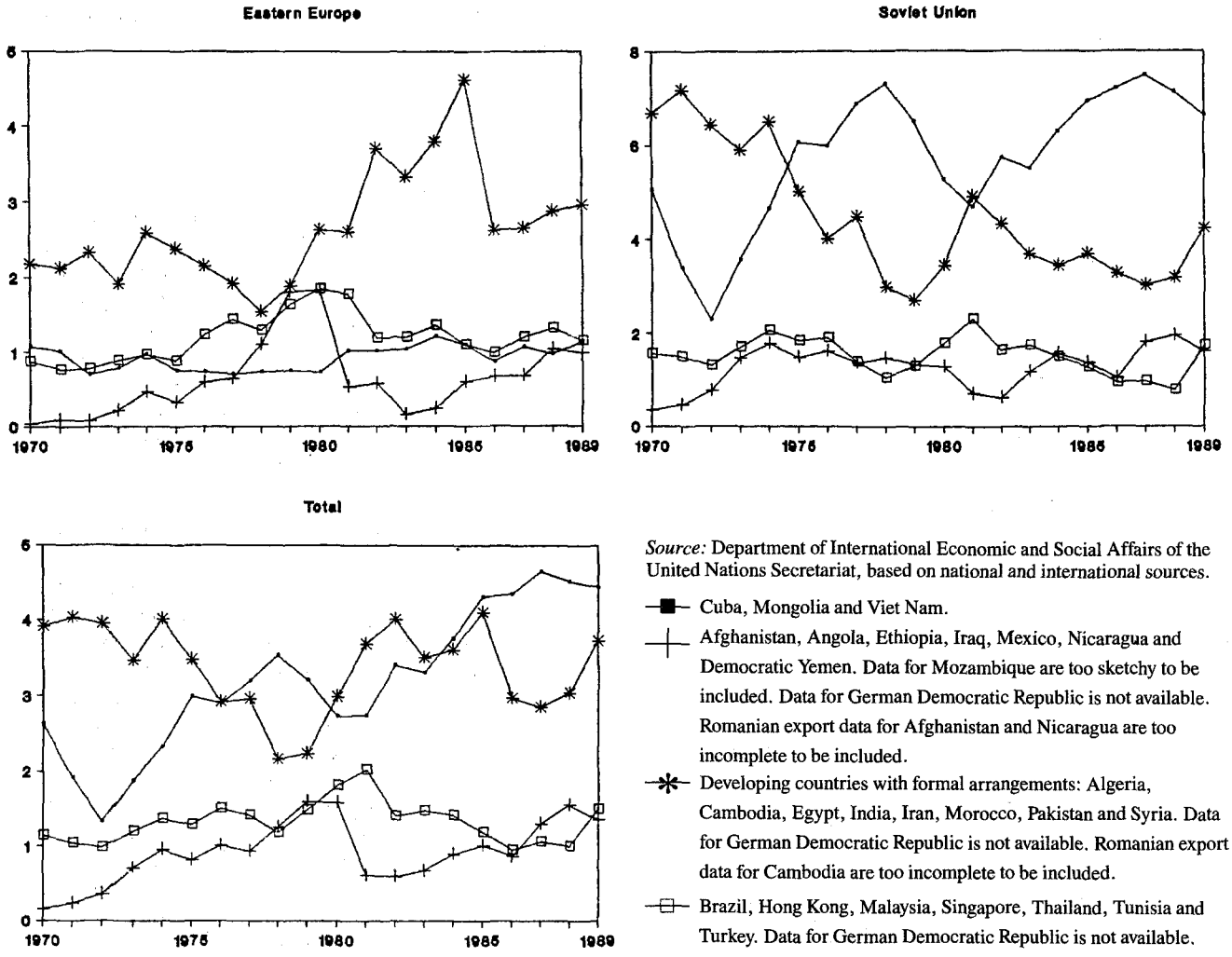
The chronic debt of Poland cast a dark shadow over Polish policy-making throughout the 1980s. By late 1990, the gross debt had swollen to nearly $50 billion dollars, including capitalized interest. As in other countries in transition, the debt burden severely narrowed the room for policy flexibility. As such, it threatened to scuttle reforms and indeed to undermine the unprecedented shock therapy administered since early 1990. Partly for that reason, Poland succeeded in convincing its principal creditor Governments in early 1990 to reschedule a significant proportion of its official debt (at end of 1990 about $33 billion). Poland also decided not to service its debt to commercial banks (at end of 1990 about $11 billion) and to various other bilateral

[53] Omitting the German Democratic Republic because its debts are now assumed by Germany.

[54] Note that a substantial share of the debt of the countries in transition is denominated in non-dollar currencies. Given the depreciation of the dollar with respect to most other convertible currencies in 1990, part of the rising debt is simply on account of the dollar's erosion (see chapter IV).

Figure VI.5. Eastern Europe and the Soviet Union, geographical distribution of imports from selected developing-country groups, 1970-1989

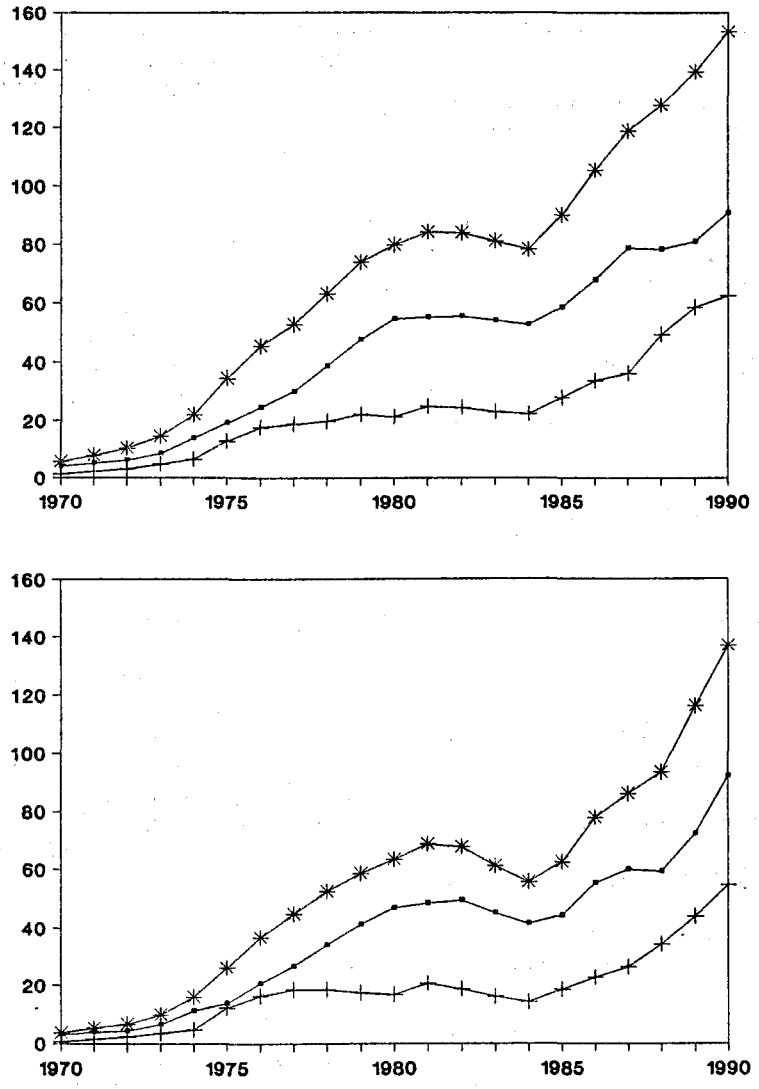
(Percentages)




*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

- Cuba, Mongolia and Viet Nam.
- Afghanistan, Angola, Ethiopia, Iraq, Mexico, Nicaragua and Democratic Yemen. Data for Mozambique are too sketchy to be included. Data for German Democratic Republic is not available. Romanian export data for Afghanistan and Nicaragua are too incomplete to be included.
- Developing countries with formal arrangements: Algeria, Cambodia, Egypt, India, Iran, Morocco, Pakistan and Syria. Data for German Democratic Republic is not available. Romanian export data for Cambodia are too incomplete to be included.
- Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Data for German Democratic Republic is not available. Romanian export data for Hong Kong are too incomplete to be included.

Figure VI.6. Eastern Europe and the Soviet Union, gross and net debt, 1970-1990
(Billions of dollars)




Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

—■— Eastern Europe without the German Democratic Republic
—+— Soviet Union
—✳— Eastern Europe and the Soviet Union including debts of CMEA banks

lenders. After protracted debates in the Paris Club, on 15 March 1991 an agreement was reached whereby about half of Poland's official debt will be forgiven. Individual creditor countries, including France, Germany and the United States, have taken steps to narrow their claims on Poland even further (to 70 per cent in the case of the United States).

From the early 1970s on, the countries of Eastern Europe, including Yugoslavia, tried to lure foreign capital through newly conceived laws on joint ventures.[55] These legal provisions have been revised several times in recent years, usually resulting in foreign capital receiving more liberal access to the country in question. Examples are the removal of restrictions on majority ownership or the setting up of wholly owned foreign corporations. In spite of these improvements and the promise of market-oriented reforms introduced in several countries (such as Hungary) prior to the events of the second half of 1989, comparatively small amounts of capital have thus far moved into the eastern part of Europe. Furthermore, some resentment has emerged against foreign capital being given various privileges, such as tax holidays, which many analysts considered to be "excessive" in some cases. In reaction, some countries (including Hungary and Poland) have recently revised these conditions.[56]

The number of joint and foreign ventures increased rapidly after *perestroyka* had encouraged these activities in the Soviet Union and after the inauguration of market-oriented reforms, or promises thereof, in countries of Eastern Europe. Several of the latter more radical reforming countries, notably Hungary and Poland, have succeeded in luring foreign investors into "taking a position" by signing joint-venture agreements. None the less, the volumes of committed funds have remained comparatively small - by late 1990, perhaps $2.5 billion at the most in any one country. Total commitments to the countries in transition amounted perhaps to $8-10 billion by late 1990.[57] Furthermore, excepting some large deals in electronics and automobile sectors, the value of each joint-venture commitment, let alone disbursement, has remained rather small, and has tended to decrease with the gradual opening up of these economies. Although these estimates do not include recent flows into the eastern parts of Germany, it is evident that even there the volume of foreign direct investment allocated, either in terms of commitments or disbursements, has fallen well short of the expectations disclosed around the time of German unification.

Disbursements on the various commitments made have thus far lagged far behind commitments, several joint-venture agreements for now remaining no more than an empty shell into which foreign capital could move at an appropriate future time. The amounts involved are not precisely known, but recent estimates place it at perhaps one fourth to one fifth of total committed sums. Hungary, for example, places actual capital flows through 1990[58] at some $0.6 billion out of a total commitment estimated at $2.5 billion. That ratio may suggest that total disbursements on committed funds to the eastern part of Europe are unlikely to have exceeded $2.5 billion in late 1990, and were probably less than that.

As suggested in section A, uncertainty has been a major deterrent to capital inflows into the East. Initially, policy makers felt that guaranteeing profit repatriation would remove most of the uncertainty. But that has evidently not been so. In some cases, especially in Hungary and Poland, many of the joint ventures or foreign-owned ventures have been of the opportunistic kind, essentially rent-seeking. The repatriation guarantees, at least in the case of Hungary, have had the paradoxical result of more investment capital flowing out than entering the country. Indeed, several of the newly formed new ventures have essentially been utilized to accommodate capital flight out of the reforming countries.[59]

### Financial links with developing countries

The vast bulk of the bilateral as well as multilateral development aid traditionally provided by the former planned economies of Europe was tied two-ways per donor-recipient country, often concealed through various price and transportation-tariff concessions. At some point, chiefly during the 1970s, efforts were channelled into multilateralizing assistance, including through various provisions and mechanisms of CMEA. But that encountered formidable obstacles. As a result, the key channels through which Eastern Europe and the Soviet Union funnelled their aid were bilateral trade and payments agreements, cooperation agreements with the eight cooperants identified earlier, and regular trade and specialization agreements with the developing countries that were full members of CMEA.

These donors used to define aid much more inclusively than is customary in recent international deliberations and conventions, which themselves leave much to be desired, and for this reason the term "aid" is utilized in this chapter. In reports submitted to international agencies, the former planned economies of Europe include aid extended to other planned economies. This is not always at variance with practices of other donors, of course. However, because the latter extend little aid to these former traditionally planned economies, certainly not in the particular formats that the European planned economies embraced, a case can be made to differentiate the two groups. That these recipient countries, by virtue of their low level of economic development, benefited from the special transferable-rouble re-

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[55] For a broad review of the state of affairs until about 1988, see *East-West Joint Ventures - Economic, Business, Financial and Legal Aspects* (United Nations publication No. E.88.II.E.18).

[56] Thus Hungary, in late February 1991, passed a law whereby joint ventures with an initial capital of less than Ft 50 million (about $0.68 million) or a foreign-capital participation of less than 30 per cent will no longer benefit from tax advantages, which are considerable (a 60 per cent concession on profit tax during the first five years and 40 per cent during the next five years). That places these enterprises on the same footing as their domestic counterparts.

[57] This does not include the unusual joint venture between Škoda in Czechoslovakia and Volkswagen in Germany. Total commitment is for possibly $6 billion to be invested until the year 2000.

[58] This was an exceptional year for Hungary, however, in view of several large commitments made, among others, by Suzuki, General Motors and General Electric.

[59] This was one of the considerations for Hungarian policy makers to close that loophole in the new law of late February 1991 mentioned earlier.

gimes for settling trade and finance is especially important. It will be useful, therefore, to deal separately with several of the analytically more meaningful groups of developing countries identified earlier.

In this connection, it is important to clarify the nature of assistance provided by the former planned economies of Europe. These economies consistently refused in the past to subscribe to international measures on resource transfers, such as indicative targets set in the United Nations international development strategies, beginning with the decade of the 1960s. Their rationale was that responsibility for the economic plight of the developing world rests squarely with the colonial and neocolonial policies of developed market economies and their organs, including the transnational corporations and banks.[60] Since the former planned economies of Europe claimed not to engage in so-called "unequal exchange", there was no reason, except socialist solidarity and international commitment, for them to feel compelled to earmark aid according to internationally agreed-upon criteria. Their assistance strategy was, therefore, geared to supporting needy countries that sought primarily to industrialize through a substantial public sector, chiefly less-developed countries with strong socialist traits in their economic and political system.

Development assistance can take on many forms. In the case of the former planned economies of Europe, however, there was a strict limit as most assistance was provided directly through net exports of goods and services by the donor country. If the assistance proceeded in the form of merchandise trade and related services, some of the disbursements can be tracked on a net basis by examining imbalances on merchandise account. But this cannot, of course, help to distinguish the particular kind of aid provided or to capture the more unusual forms of assistance discussed below. Thus, these data fail altogether when the transfer of aid proceeded through direct provision of services (such as scholarships for students from developing countries attending institutions of higher learning in the planned economies or technicians from the latter countries assisting with the construction of a certain development project) or when assistance was granted in the form of concessions in prices and tariffs of traded goods and services. Nor can this way of proceeding lead to quantification with any comfortable degree of precision, for some trade imbalances are settled in convertible currencies and some imbalances may be offset by reverse imbalances on service accounts (such as for shipping, tourism and unrequited transfers). Also, the imbalance may, in fact, be supported, for example, by short-term supplier credits that must be reversed relatively quickly. However, if aggregate imbalances run consistently in one direction or are not reversed over a protracted period of time, it would appear safe to assume that some part of the gap originally stemmed from long-term capital transfers, possibly grants in aid, some of which may have been arranged *ex post*.[61] Inasmuch as such flows were routinely provided at concessionary interest rates (customarily between 2 and 4 per cent, with the bulk of loans being arranged at the lower end of that range of service charges) with long grace and repayment periods, an examination of cumulative trade imbalances gives some insight into actual transfers.

Three different sets of data elucidate one aspect or another of the aid levels that the former planned economies of Europe provided to various groups of developing countries. None of them alone can serve as an accurate gauge of aid commitments or disbursements, however. The first set of data illustrate the magnitude and evolution of merchandise trade imbalances on a cumulative basis. The second set compiles the aid data that four donor countries used to provide to international organizations during parts of the 1980s. The final set compiles the estimates of disbursements on ODA accounts prepared by OECD.

### Cumulative trade imbalances

Regarding cumulative trade imbalances with conventional groupings of developing countries (see table VI.15), it is assumed that no significant imbalances occurred in the base year (1959). These data suggest that the former planned economies of Europe, especially the Soviet Union, as per their classification, sustained considerable net export surpluses with developing countries over the years (totalling $96.4 billion in 1989), although they started the 1960s with a small deficit ($0.1 billion). From a deficit in the early 1960s, the Soviet Union's cumulative surplus, with 1959 set equal to balance, expanded from $0.2 billion in 1962 to $68.4 billion in 1989. Eastern Europe's by contrast, started from $0.1 billion in 1960 and ended in 1989 with a sizeable cumulative surplus of $28.1 billion. With few exceptions in the mid-1970s, there was a fairly consistent rise in this surplus until the latter half of the 1980s. Such considerable net merchandise exports, given the nature of tied assistance, are suggestive of the magnitude of accumulated capital transfers to developing countries.

Regarding the three developing-country CMEA members (see table VI.16 and figure VI.7), the European partners have run sizeable and growing cumulative imbalances. Whereas in 1960 this amounted to about $17 million, this figure had multiplied many times by 1989, reaching $36 billion. The real value of these transfers was, of course, eroded over the years as a result of upward price drift. But the data exhibited suggest none the less the possibility of a substantial real increase in aid over the period examined. Note that by far the larger part of this expansion was offered by the Soviet Union. Its share in the cumulative surplus of Eastern Europe and the Soviet Union combined reached 88 per cent in 1989. Eastern Europe's surplus expanded rapidly until the early 1980s, when it continued to rise, but at a much slower pace than the surplus maintained by the USSR; there may, in fact, have been a reversal in 1989.

With respect to the eight CMEA cooperants, the surplus rose too and more rapidly than for all developing countries combined, particularly since the mid-1970s, when the first such agreements were signed. This was especially true for the Soviet Union, because Eastern Europe reversed some of its imbalances around 1980, but thereafter, until 1987, raised them considerably once again. Although the Soviet share of the surplus accounted for around 57 per cent of the total surplus in 1989, it had

[60] See *Proceedings of the United Nations Conference on Trade and Development, Fourth Session*, vol. I, *Reports and Annexes* (United Nations publication, Sales No. E.76.II.D.10) and "Joint statement of Group D and Mongolia regarding the launching of global negotiations" (A/38/479, 1983).

[61] Note, however, that some loans that were "in principle" assumed to have been written off have recently been called up for a number of countries. Whether a substantial repayment will, in the end, occur is a different matter, of course.

Table VI.15. Eastern Europe and the Soviet Union: cumulative export surpluses with developing countries and country groups, 1960-1989
(Millions of dollars)

| Year | Total | Africa | Total Middle East | Asia | Latin America | Soviet Union Total | Africa | Middle East | Asia | Latin America | Eastern Europe Total | Africa | Middle East | Asia | Latin America |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | -141 | -107 | 60 | -153 | -14 | -197 | -102 | 26 | -145 | -4 | 56 | -5 | 34 | -8 | -11 |
| 1961 | -31 | -96 | 150 | -246 | -54 | -177 | -71 | 73 | -288 | -25 | 146 | -25 | 76 | 42 | -29 |
| 1962 | 462 | -15 | 237 | -317 | -129 | 227 | -31 | 119 | -374 | -61 | 235 | 16 | 118 | 57 | -68 |
| 1963 | 768 | 5 | 343 | -275 | -230 | 490 | -27 | 169 | -333 | -106 | 278 | 32 | 173 | 58 | -125 |
| 1964 | 1162 | 49 | 456 | -183 | -335 | 829 | 37 | 202 | -276 | -140 | 333 | 12 | 254 | 92 | -195 |
| 1965 | 1520 | 170 | 560 | -157 | -539 | 1136 | 117 | 240 | -299 | -199 | 384 | 53 | 320 | 142 | -341 |
| 1966 | 2011 | 273 | 744 | -202 | -750 | 1477 | 209 | 318 | -365 | -321 | 534 | 64 | 426 | 163 | -429 |
| 1967 | 2835 | 485 | 1002 | -272 | -855 | 2042 | 363 | 425 | -431 | -374 | 793 | 122 | 577 | 159 | -481 |
| 1968 | 3583 | 545 | 1330 | -352 | -981 | 2586 | 400 | 579 | -506 | -434 | 997 | 145 | 751 | 154 | -547 |
| 1969 | 4430 | 612 | 1806 | -483 | -1106 | 3172 | 416 | 832 | -666 | -513 | 1258 | 196 | 974 | 183 | -593 |
| 1970 | 5430 | 752 | 2316 | -775 | -1283 | 3939 | 459 | 1120 | -936 | -583 | 1491 | 293 | 1196 | 161 | -700 |
| 1971 | 6370 | 866 | 2824 | -963 | -1472 | 4557 | 480 | 1394 | -1181 | -685 | 1813 | 385 | 1430 | 217 | -787 |
| 1972 | 7492 | 1028 | 3215 | -1303 | -1682 | 5364 | 511 | 1528 | -1473 | -817 | 2128 | 517 | 1688 | 170 | -865 |
| 1973 | 9373 | 1214 | 3636 | -1683 | -2240 | 6980 | 542 | 1615 | -1762 | -1144 | 2392 | 673 | 2020 | 79 | -1095 |
| 1974 | 10875 | 1319 | 3830 | -1920 | -2803 | 8306 | 485 | 1594 | -2091 | -1409 | 2570 | 834 | 2236 | 171 | -1394 |
| 1975 | 12189 | 1122 | 4676 | -2128 | -3793 | 8737 | 83 | 1676 | -2360 | -2270 | 3452 | 1039 | 3001 | 232 | -1523 |
| 1976 | 14008 | 1291 | 5536 | -2637 | -4808 | 9978 | -63 | 1762 | -2637 | -2980 | 4030 | 1354 | 3774 | -1 | -1828 |
| 1977 | 18134 | 1890 | 6666 | -3291 | -5827 | 13157 | -145 | 2062 | -3064 | -3407 | 4977 | 2035 | 4605 | -227 | -2420 |
| 1978 | 23325 | 2545 | 8315 | -3514 | -7086 | 17391 | -247 | 3050 | -3215 | -4026 | 5934 | 2792 | 5265 | -299 | -3060 |
| 1979 | 28446 | 2683 | 10240 | -3692 | -8528 | 22123 | -626 | 4740 | -3379 | -4706 | 6323 | 3309 | 5500 | -313 | -3822 |
| 1980 | 30780 | 2932 | 11392 | -4330 | -11778 | 24863 | -839 | 5988 | -4088 | -6843 | 5917 | 3771 | 5403 | -243 | -4935 |
| 1981 | 35429 | 4241 | 15084 | -5250 | -16763 | 26103 | -863 | 7711 | -5197 | -10890 | 9327 | 5104 | 7374 | -52 | -5873 |
| 1982 | 44110 | 4813 | 19008 | -6068 | -19403 | 30890 | -1476 | 9823 | -6063 | -13022 | 13220 | 6289 | 9185 | -5 | -6381 |
| 1983 | 51578 | 5288 | 20926 | -5767 | -22204 | 35398 | -1649 | 10147 | -5926 | -15458 | 16179 | 6937 | 10779 | 159 | -6746 |
| 1984 | 58739 | 5448 | 21757 | -5470 | -24293 | 39559 | -2271 | 9639 | -5741 | -17027 | 19180 | 7719 | 12118 | 271 | -7266 |
| 1985 | 63006 | 5204 | 23145 | -5375 | -26251 | 41914 | -2925 | 9323 | -5667 | -18676 | 21092 | 8129 | 13823 | 291 | -7575 |
| 1986 | 71792 | 5351 | 24320 | -5387 | -26747 | 48524 | -3725 | 9442 | -5701 | -18887 | 23269 | 9077 | 14878 | 314 | -7861 |
| 1987 | 81687 | 6917 | 24843 | -4727 | -27909 | 56438 | -3605 | 9276 | -5203 | -19544 | 25249 | 10522 | 15567 | 476 | -8366 |
| 1988 | 90736 | 7776 | 25025 | -3816 | -29502 | 63387 | -4015 | 8534 | -4594 | -20431 | 27349 | 11792 | 16491 | 779 | -9071 |
| 1989 | 96438 | 8589 | 23003 | -4171 | -30934 | 68366 | -3928 | 6884 | -5276 | -21585 | 28071 | 12517 | 16119 | 1106 | -9349 |

*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

Table VI.16. Eastern Europe and the Soviet Union: cumulative export surpluses with selected groups of developing countries, 1960-1989
(Millions of dollars)

| Year | Total | | | | Soviet Union | | | | Eastern Europe | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CMEA | Cooperants | DEFA | NIEs | CMEA | Cooperants | DEFA | NIEs | CMEA | Cooperants | DEFA | NIEs |
| 1960 | 17 | 48 | -79 | -133 | -1 | 30 | -69 | -100 | 18 | 19 | -10 | -33 |
| 1961 | 82 | 109 | -50 | -332 | 24 | 82 | -22 | -283 | 58 | 27 | -28 | -49 |
| 1962 | 289 | 183 | 50 | -499 | 247 | 146 | 57 | -459 | 42 | 37 | -7 | -40 |
| 1963 | 646 | 249 | 199 | -657 | 566 | 200 | 202 | -605 | 81 | 49 | -3 | -52 |
| 1964 | 900 | 334 | 325 | -753 | 740 | 253 | 330 | -683 | 160 | 81 | -5 | -70 |
| 1965 | 1053 | 355 | 437 | -904 | 883 | 315 | 413 | -796 | 171 | 40 | 23 | -109 |
| 1966 | 1445 | 458 | 550 | -1035 | 1215 | 395 | 504 | -903 | 229 | 63 | 46 | -132 |
| 1967 | 1987 | 539 | 786 | -1147 | 1657 | 452 | 698 | -1011 | 331 | 87 | 88 | -137 |
| 1968 | 2735 | 628 | 950 | -1301 | 2285 | 503 | 825 | -1119 | 450 | 125 | 125 | -183 |
| 1969 | 3587 | 794 | 1130 | -1459 | 2993 | 580 | 932 | -1239 | 594 | 214 | 199 | -220 |
| 1970 | 4095 | 950 | 1306 | -1602 | 3427 | 652 | 1024 | -1344 | 668 | 298 | 282 | -258 |
| 1971 | 4711 | 1159 | 1360 | -1731 | 4009 | 759 | 970 | -1438 | 702 | 400 | 391 | -293 |
| 1972 | 5519 | 1302 | 1152 | -1850 | 4756 | 801 | 737 | -1491 | 763 | 501 | 415 | -359 |
| 1973 | 6272 | 1335 | 1020 | -2184 | 5452 | 749 | 601 | -1686 | 820 | 585 | 419 | -498 |
| 1974 | 6910 | 1328 | 866 | -2625 | 6145 | 652 | 439 | -1966 | 765 | 676 | 427 | -659 |
| 1975 | 7096 | 1539 | 649 | -3181 | 6192 | 606 | 149 | -2448 | 904 | 933 | 500 | -732 |
| 1976 | 7678 | 1593 | 745 | -3820 | 6636 | 605 | 18 | -2959 | 1043 | 989 | 727 | -861 |
| 1977 | 8347 | 1704 | 1208 | -4455 | 7161 | 760 | -2 | -3243 | 1186 | 952 | 1209 | -1213 |
| 1978 | 9032 | 2071 | 2189 | -5085 | 7601 | 1434 | 368 | -3549 | 1431 | 670 | 1821 | -1537 |
| 1979 | 10350 | 2390 | 3064 | -5597 | 8658 | 2521 | 852 | -3769 | 1692 | -68 | 2211 | -1829 |
| 1980 | 12436 | 2419 | 3779 | -6800 | 10318 | 3176 | 1217 | -4369 | 2119 | -670 | 2561 | -2431 |
| 1981 | 15202 | 5808 | 4061 | -8383 | 12818 | 4914 | 916 | -5485 | 2384 | 1029 | 3146 | -2898 |
| 1982 | 17838 | 9420 | 3907 | -9241 | 15055 | 6847 | 842 | -6215 | 2783 | 2760 | 3066 | -3026 |
| 1983 | 20949 | 11506 | 4756 | -10133 | 17766 | 7746 | 1540 | -7234 | 3182 | 4050 | 3216 | -2899 |
| 1984 | 23244 | 13318 | 4732 | -10420 | 19804 | 8465 | 2125 | -8052 | 3440 | 5309 | 2607 | -2368 |
| 1985 | 25005 | 15054 | 4544 | -10850 | 21469 | 9299 | 2388 | -8762 | 3536 | 6310 | 2156 | -2088 |
| 1986 | 27709 | 17114 | 4428 | -11224 | 23959 | 10633 | 2152 | -9280 | 3750 | 7115 | 2277 | -1944 |
| 1987 | 30669 | 18518 | 4808 | -11599 | 26769 | 11305 | 2609 | -9655 | 3900 | 7951 | 2199 | -1944 |
| 1988 | 33663 | 19222 | 4917 | -11768 | 29436 | 11676 | 2587 | -9948 | 4228 | 8361 | 2330 | -1820 |
| 1989 | 35979 | 19415 | 3478 | -12534 | 31730 | 12025 | 1317 | -11088 | 4249 | 8266 | 2161 | -1445 |

*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

[a] Cuba, Mongolia and Viet Nam.

[b] Afghanistan, Angola, Ethiopia, Iraq, Mexico, Nicaragua and Democratic Yemen. Data for Mozambique are too sketchy to be included. Data for German Democratic Republic is not available. Romanian export data for Afghanistan and Nicaragua are too incomplete to be included.

[c] Developing countries with formal arrangements : Algeria, Cambodia, Egypt, India, Iran, Morocco, Pakistan and Syria. Data for German Democratic Republic is not available. Romanian export data for Cambodia are too incomplete to be included.

[d] Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Data for German Democratic Republic is not available. Romanian export data for Hong Kong are too incomplete to be included.

Table VI.17. Eastern Europe and the Soviet Union: aid commitments, 1976-1988
(Percentage of NMP or GDP)

| | Bulgaria | Czechoslovakia[a] | German Democratic Republic[a] | Soviet Union |
|---|---|---|---|---|
| 1976-1981 | 0.79 | | | |
| 1976 | | | | 0.9 |
| 1976-1980 | | | | 1.0 |
| 1980 | | | | 1.3 |
| 1981-1985 | | 0.89 | 0.78 | 1.3 |
| 1981 | | | 0.79 | 1.3 |
| 1982 | | 0.74 | 0.78 | 1.3 |
| 1983 | | 0.78 | 0.79 | 1.2 |
| 1984 | | 0.90 | 0.82 | 1.4 |
| 1985 | 0.88 | 0.91 | 0.86 | 1.5 |
| 1986 | 1.23 | 1.08 | 0.89 | |
| 1987 | | | 0.87[c] | 1.4 |
| 1988 | | | | 0.64[b] |

*Source:* Based on various documents of the Economic and Social Council, the General Assembly and UNCTAD.

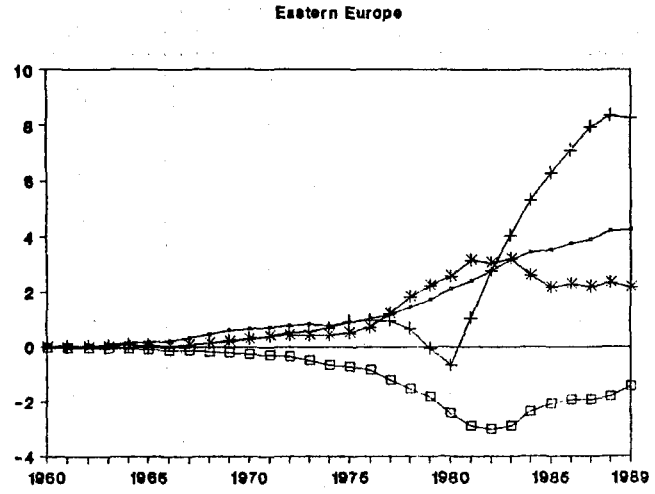
[a] Relative to "national income", probably NMP.

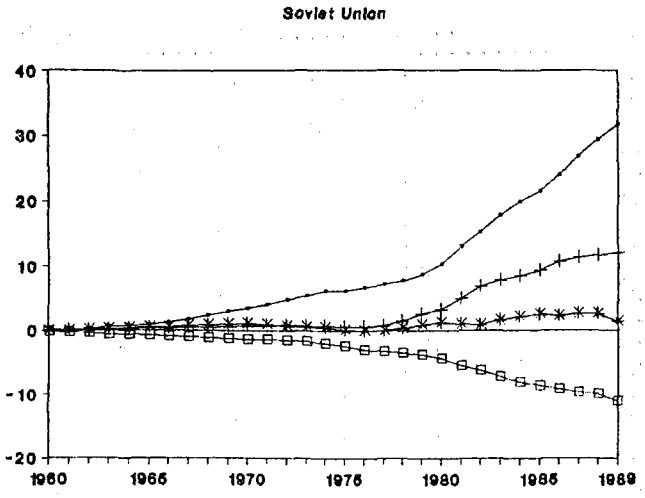
[b] Relative to GNP.

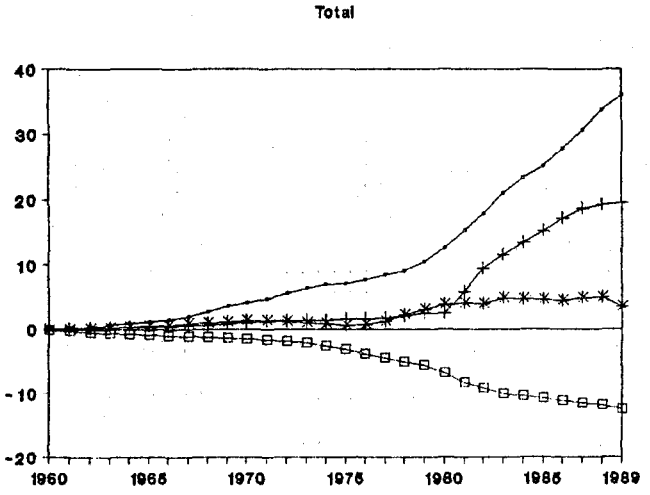
[c] 0.7 per cent of GNP.

Figure VI.7. Eastern Europe and the Soviet Union, cumulative export surpluses with selected groups of developing countries, 1960-1989

(Billions of dollars)




*Source:* Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources.

- Cuba, Mongolia and Viet Nam.
- Afghanistan, Angola, Ethiopia, Iraq, Mexico, Nicaragua and Democratic Yemen. Data for Mozambique are too sketchy to be included. Data for German Democratic Republic is not available. Romanian export data for Afghanistan and Nicaragua are too incomplete to be included.
- Developing countries with formal arrangements: Algeria, Cambodia, Egypt, India, Iran, Morocco, Pakistan and Syria. Data for German Democratic Republic is not available. Romanian export data for Cambodia are too incomplete to be included.
- Brazil, Hong Kong, Malaysia, Singapore, Thailand, Tunisia and Turkey. Data for German Democratic Republic is not available. Romanian export data for Hong Kong are too incomplete to be included.

been well above that figure in earlier years.

Table VI.16 also lists cumulative surpluses with the group of developing countries whose commercial ties with Eastern Europe and the Soviet Union remained intimate, at least recently. Also here, a sizeable increase in export surplus occurred over time. Unlike in the case of the countries having some formal status with the CMEA, Eastern Europe in particular was running sizeable surpluses with the group under consideration, although the total value of the surplus, by and large, stagnated since 1980; the Soviet Union's was reversed in 1988 and sharply again in 1989.

Finally, table VI.16 includes data on imbalances with a select group of NIEs. As could be anticipated, Eastern Europe and especially the Soviet Union report sizeable deficits with these countries.

### Official aid data

The second data set relies on the statistics on aid levels that the Soviet Union and three Eastern European countries (Bulgaria, Czechoslovakia and the German Democratic Republic) submitted during the 1980s to various organs of the United Nations. The definition used by these countries, while not fully detailed, admittedly differs from what is now more or less standard in reports released by members of the Development Assistance Committee (DAC) of OECD, for example.

Calculations prepared by donor countries among the former planned economies include, of course, loans with a grant element of not less than 25 per cent and outright grants, as for DAC data (see below). The former planned economies of Europe traditionally granted loans at low interest rates and with long maturities that have a significant embedded grant element. On the other hand, such commitments can only be utilized in the donor country for goods and services that the latter is able and willing to earmark for aid. That, of course, is not an exclusive feature of aid from former planned economies.

In addition to what might be termed regular ODA as per the DAC's measuring rod, statistics disclosed by the former planned economies include concealed subsidies in the payment for the services of specialists abroad, training of individuals from developing countries,[62] transfer of equipment and technological know-how to developing countries and in the sphere of foreign trade (including price subsidies and favourable maritime transport tariffs).[63] For example, if goods exported to developing countries are invoiced below "recognized" world prices, the aggregate difference is treated as aid;[64] when no price is charged, as in the case of student exchanges or technical assistance embodied in sending specialists to developing countries on a temporary basis, the efforts are evaluated according to "international" criteria, oftentimes the costing procedures of organizations of the United Nations system, those of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in particular.

The question arises whether these flows should be treated as aid. To the extent that most of these efforts are explicitly designed to further development in selected countries, such transfers should be included. If the negotiated transferable-rouble price is well below the reference average world price, that suggests concealed price subsidies and should be counted as aid if arranged to further development in the recipient country. Similarly, price differences that are deliberately maintained for the transfer of resources for purposes other than economic development, such as military assistance or for the financing of military operations in third countries, should not be included in aid estimates; but it is treated as such by several members of the DAC as well. Needless to say, it is well-nigh impossible to separate finely such resource transfers according to the purposes they were originally designed to serve.

Table VI.17 lists the official data that the four enumerated European planned economies submitted to various United Nations organs from the early 1980s until about 1987. The table lists only the percentages of aid relative to some national aggregate[65] that the donors report to have committed. Absolute values are sometimes also given, but it is inherently difficult to convert local currency values, sometimes expressed in the local equivalent of foreign currency transfers translated at the official exchange rate, which can be different from the corresponding values expressed at domestic transaction prices, to dollar magnitudes for technical reasons.

According to such claimed aid magnitudes, all countries provided at or better than the international norm of 0.7 per cent of official aid relative to GDP set for the Second United Nations Development Decade declared for the 1970s.[66] There was also a sharp increase in the level of assistance provided by the Soviet Union, from 0.9 per cent of NMP in 1976 to 1.3 per cent in 1980 and about 1.5 per cent in the mid-1980s; it declined slightly thereafter. The rise was also pronounced for Czechoslovakia, inching up from 0.74 per cent in 1982 to over 1 per cent in 1986. In the case of the German Democratic Republic, there has been a rise too but a much more muted one - and perhaps a decline in 1988 - than is evident for Czechoslovakia and the Soviet Union. Although the data for Bulgaria are incomplete, the available magnitudes suggest that it also has been raising its relative assistance level.

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[62] Whereas in DAC accounting of technicians, for example, actual expenditures are invoiced, in the accounting of the former planned economies "international" norms are factored into the claimed assistance.

[63] See *Official Records of the Trade and Development Board, Twenty-seventh Session, Supplement No. 2* (TD/B/949 - TD/B/C.3/186), para. 231.

[64] When the reverse occurs, however, no subtraction appears to be made.

[65] In some reports, the concept of national income is used, but it is not clear what this may mean. In some cases, reference is unambiguously to net material product (NMP). In others, the reference base is ambiguous, but it is conjectured to be the conventional national-accounting framework of the reporting country.

[66] That also had in addition a private component amounting to 0.3 per cent of GDP. But this could not possibly be applied to the former planned economies, inasmuch as there is inherently little private development assistance raised in these countries.

### Estimates prepared by DAC

The OECD has over the years made a systematic effort to measure disbursements of aid by the former planned economies of Europe according to its own definitions.

It is useful to recall, however, that any definition of ODA would be to some degree arbitrary. DAC members provide the bulk of the resources transferred to developing countries. They determine their ODA according to common norms, but with variations over time that, especially in preparing the estimates for Eastern Europe and the Soviet Union, are exacerbated by frequent shifts in accounting techniques. As a result, even these compilations, in view of the political import of DAC reports, contain data that are frequently hard to reconcile with each other and over time.[67] The most recent guidelines were adopted in 1972.

In DAC's definition, ODA comprises resources transferred to developing countries, possibly through multilateral institutions, by official agencies, including state and local governments or by their executive organs, that meet two tests. First, the transaction is administered for the promotion of economic development and raising the welfare levels of developing countries. Second, it is concessional in character, with a grant element of at least 25 per cent.[68]

Because of the nature of the information upon which aggregate estimates were prepared, these data have been under revision on nearly a continuous basis as details are collected. This introduces one uncertainty in the data as revisions are not always carried out for the entire historical series. Another source of bias stems from definitions. For one thing, OECD's estimation procedures depend to a large extent on what can be gleaned from the press and the information that recipient countries may be willing to share. Also, DAC measurements essentially ignore a number of non-market transfer mechanisms that would not normally be tolerated in trade by market economies. Thus, the aggregate value of assistance provided in the forms of price supports, such as those arranged for sugar and nickel from Cuba; of concessionary maritime transport tariffs, as ocean-liner shipments to Viet Nam; of concessionary prices such as for Soviet petroleum; of easy payment terms for technical assistance; of training of students from developing countries free of charge; and so on are largely ignored in DAC estimation procedures. Finally, DAC data are frequently utilized for political purposes in OECD and various East-West deliberations, and perhaps for that reason exhibit wide fluctuations in reported data that are hard to rationalize.

The summary of key aggregates of these efforts provided in table VI.18 discloses several interesting features. Perhaps most conspicuous are two: that the share of multilateral assistance provided through official CMEA channels (such as from the two CMEA banks or the student stipend fund) or official international donor organizations remained negligible - well below 1 per cent of the estimated total - and that there was an appreciable decline in the total value of assistance provided since 1987 on account of both the Soviet Union and Eastern Europe. In addition, traditionally the vast bulk of aid has been extended by the Soviet Union. Also, the major share of the increment in aid provided in the second half of the 1980s was overwhelmingly on account of the Soviet Union. Thus, whereas the latter accounted for about 80 per cent of total aid extended by the European planned economies in 1970, its share in the 1980s rose consistently to about 90 per cent in the most recent years for which data are available.

As regards the distribution of aid by groups of recipients, the vast bulk of aid from the former planned economies of Europe was earmarked in particular for other planned economies, in the first instance the three countries that were CMEA members. Thus, whereas the shares of these CMEA and other planned economies considered to be developing countries were in 1970 about 71 and 17 per cent, respectively, the corresponding magnitudes were 66 and 23 per cent in 1980 and 73 and 13 per cent, respectively, in 1988. In other words, including scholarships that are not identified by the recipients but are mostly for these planned-economy recipients, over 85 per cent of the estimated aid disbursements went to developing-country socialist partners. Inasmuch as this assistance flowed to countries that, for one reason or another, were otherwise almost excluded from the international assistance effort, the importance of the efforts made by Eastern Europe and the Soviet Union should be stressed.

Of course, the percentage of disbursements to national output estimated by OECD - between 0.14 in 1975 and 0.23 per cent in 1985 - amounted to only about one fifth to one fourth of the levels that the donors among the European planned economies claim for themselves (see table VI.17). These magnitudes appear to understate sharply total aid disbursements by the former planned economies of Europe, for reasons examined earlier. If correction is made for the disproportionate weight of non-conventional forms of resource transfer, the overall assistance record of the former planned economies of Europe - particularly the Soviet Union's - seen in the global resource-transfer record is by no means an inferior one. It certainly remained well below the highly performing donors, such as the Netherlands and the Nordic countries among the developed market economies and several of the oil exporters of the Middle East among the better-off developing countries. But it compares rather favourably with the relative aid magnitudes reported in recent years for most other developed market economies.

## Other external linkages

The main other external linkage refers to labour migration. But no systematic data are available. Until the turmoil of late 1989, however, labour migration from or into Eastern Europe and the Soviet Union was as a rule not encouraged. It was chiefly handled in bilateral agreements signed by one of the planned economies with the country desirous of importing or exporting labour. Temporary emigration from the European planned economies was usually arranged in conjunction with the trans-

[67] But that does not necessarily warrant over-emotional charges, such as in Walter Kaiser, "Die Entwicklungshilfe-Leistungen der Sowjetunion in den OECD-Publikationen", *Journal für Entwicklungspolitik*, No. 2 (1986), pp. 32-51, to the effect that DAC reports are deliberately falsified.

[68] *Development Co-operation - Efforts and Policies of the Members of the Development Assistance Committee: 1983 review* (Paris, Organisation for Economic Co-operation and Development, 1983), p. 169.

Table VI.18. Eastern Europe and the Soviet Union: aid disbursements, 1970-1989
(Millions of dollars)

| | 1970 | 1975 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Bilateral* | | | | | | | | | | | | |
| CMEA developing countries | 715 | 1310 | 1862 | 2268 | 2349 | 2514 | 2560 | 2631 | 3086 | 3662 | 3427 | ... |
| Other developing countries with planned economy | 174 | 95 | 661 | 449 | 369 | 639 | 469 | 553 | 688 | 586 | 590 | ... |
| Other developing countries | 476 | 607 | 825 | 93 | 66 | 833 | 832 | 857 | 1230 | 1022 | 871 | ... |
| Scholarships | 42 | 71 | 200 | 360 | 415 | 270 | 275 | 300 | 310 | 330 | 330 | ... |
| *Multilateral* | 6 | 10 | 14 | 12 | 27 | 9 | 26 | 13 | 14 | 18 | 24 | 46 |
| *Total* | 1004 | 1502 | 2827 | 3182 | 3226 | 3478 | 3402 | 3618 | 4639 | 5006 | 4692 | 4300 |
| Soviet Union | 798 | 1264 | 2313 | 2602 | 2617 | 3046 | 2891 | 3064 | 4118 | 4485 | 4212 | 3900 |
| Eastern Europe | 206 | 238 | 514 | 580 | 609 | 432 | 511 | 554 | 521 | 521 | 480 | 400 |
| *Percentage of GNP* | ... | 0.14 | 0.17 | 0.21 | 0.22 | 0.21 | 0.23 | 0.23 | ... | ... | ... | ... |

*Source: Development Co-operation Efforts and Policies of the Members of the Development Assistance Committee*, various issues (Paris, Organisation for Economic Co-operation and Development).

fer of technology or development assistance, as well as commercial and other representations abroad. Most of the inflow of labour from elsewhere, especially the developing-country CMEA members, was arranged in the broader context of development assistance.

Hungary and Yugoslavia were major exceptions to this rule of emigration from the East. Both allowed their citizens to work abroad on whatever terms they could obtain, but Hungary enacted this enabling legislation only in the mid-1980s. Hungary continued to arrange for traditional forms of labour migration too, however. Exact numbers are not precisely known. In the case of Hungary, migration may have been several tens of thousands at most. There were also several thousand individuals from other former planned economies, especially Poland, working chiefly in Western Europe, frequently on an informal or even illegal basis. In the case of Yugoslavia, however, even during the 1960s hundreds of thousands of migrants had moved chiefly to Western Europe in search of better opportunities. Incidentally, the reflow of these migrants into Yugoslavia in recent years provided a major source of foreign exchange because of the associated repatriation of savings. However, this is a one-time benefit. Worker remittances from "guest" workers in Europe have in the process become less congenial than they were in the 1960s and early 1970s.

Another exception was the emigration from the European planned economies which gathered major force in 1989. Traditionally, voluntary emigration from East to West had been restricted chiefly to the repatriation of citizens of German origin or segments of the Jewish population bent on moving abroad, including to Israel. In the summer of 1989, however, a wholesale wave of migrants from the German Democratic Republic moved to the Federal Republic of Germany, where they automatically obtained citizenship and some adjustment allowances. Also the emigration of mostly Jewish citizens from the Soviet Union gathered momentum. Furthermore, until about August 1989, the Turkish minority in Bulgaria was induced to move to Turkey, where absorption capacity was however limited, and so a partial reflux occurred in the latter part of the year.

There was also a major exception to the rule of immigration of labour into Eastern Europe and the Soviet Union. Because of the emerging labour shortages in the late 1970s and the need for developing countries indebted mainly to the USSR, but also to some Eastern European countries to begin servicing their long-term obligations, arrangements were made whereby citizens from the latter, chiefly the developing-country CMEA members, could be profitably employed in one of the European planned economies. This had two purposes. One was to acquire new knowledge - a form of development assistance. The other was the limited export capacity of debtors to Eastern Europe and the Soviet Union. Because most were in labour surplus, especially Viet Nam after reunification, the need for training was combined with debt-servicing obligations, however modest, by arranging for labour contracts with the lending countries. Under those provisions, immigrant workers were paid their national wage plus fringe benefits, including favourable access to goods and services upon expiry of their work contract, but the country of origin obtained a wage close to local conditions of the host. The difference was utilized to service and amortize part of the debt.

## Conclusions

If there is one conclusion to be drawn from the available empirical record of the past external linkages of the Eastern countries, including Yugoslavia, it is the highly unsatisfactory quality and quantity of the data. Although rectification may not be a matter of urgent priority, given the nature of the transitions in the East, it would still be highly instructive to have some quantitative reference framework available, if only for heuristic purposes.

At a time that opportunities for increased cooperation at the global level are emerging, as examined in greater detail in chapter I, it has become particularly important to have available accurate, timely and transparent quantitative information. This is critical for monitoring and assessing the transition and its impacts on the East-West environment. Such information is also a pivotal input into disclosing areas where global cooperation may be most effective both in terms of stimulating reforms and in minimizing their adverse impact on the more vulnerable sectors of the world economy.

## Chapter VII

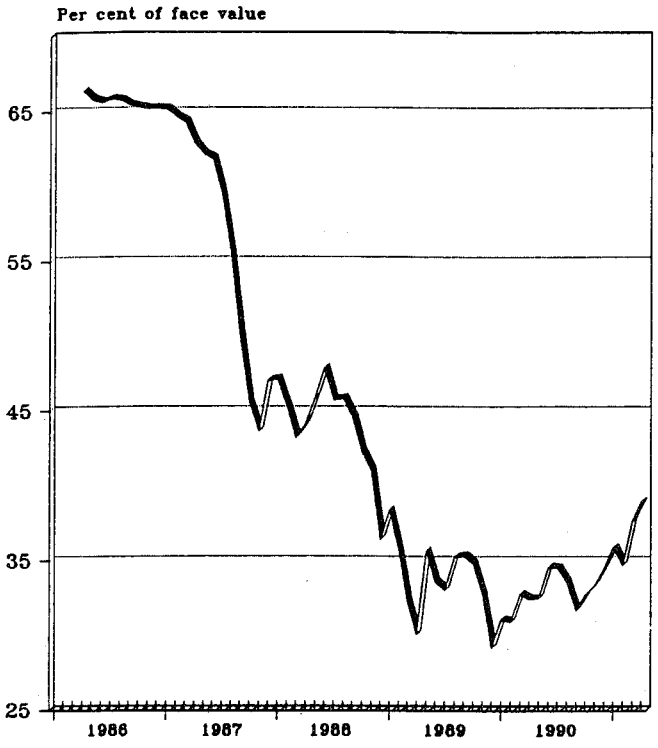
# INTERNATIONAL POLICY FOR REDUCING DEVELOPING COUNTRY DEBT, 1990-1991

International policy on the foreign debt of developing countries has evolved dramatically since the early 1980s. At that time, policy was shaped by the fear of a major disruption of the international banking system and the hope that what was thought to be a liquidity crisis in several heavily indebted countries would be short-lived. It led to assertions that the value of the debt outstanding was not impaired and that normal debt-servicing would soon resume if current obligations were rescheduled, if new loans were extended by private creditors and official lenders, and if appropriate adjustment measures were taken in the affected economies. The underlying assumption was that the economic recession in the industrialized economies would quickly end, that they would grow by 3 per cent a year or more and that this would raise international commodity prices and the volume of world trade enough to permit the heavily indebted countries to grow out of their debt crises. The strategy was applied to all countries having debt-servicing difficulties, from low-income countries mainly indebted to Governments to middle-income countries mainly indebted to foreign commercial banks. It did not work.

By the mid-1980s, a secondary market arose in the loans of commercial banks to several developing and certain Eastern European countries. The bids to buy and offers to sell at less than face value showed that at least some banks valued the debt below par. The market at first mainly served to help banks that wanted to swap their holdings of loans to different countries or change the proportion of their assets denominated in different currencies or paying different interest schedules. Cash sales of bank loans were infrequent — they are still intermittent — but the turnover of the market has nevertheless grown.[1] So, too, has the discount on the debt, as figure VII.1 shows for a sample of 15 heavily indebted countries, whose debt makes up 94 per cent of the bank exposure to the countries having debt in the market.[2] In fact, the debt of the 15 countries accounted for 87 per cent of the total in 1986-1988, as the debt of more countries was then traded, the total falling from 34 countries in 1986 to 17 now.[3] In some cases, the debt was removed from the market by debt-reduction schemes, repayment or, in the case of Turkey, by ceasing to trade at a discount. However, in many other cases, especially for some African countries, the debt is still outstanding, but considered of too poor a quality to trade at all.

Although there is no secondary market for government-to-government debt, the assessment of the ability of many problem debtors to service their outstanding official debt would be comparable. Thus, the emphasis in policy- making circles has increasingly become how to reduce the debt burden of these countries by reducing the debt itself to a more manageable sum, whether it be by partial forgiveness for certain inter-official debts, or negotiated asset exchanges in which bank loans are exchanged for a smaller value of bonds, or by debtor country repurchases of debt at a discount, or myriad other means that financial engineers continue to design. To date, the debt of a few countries has been reduced significantly, but in all cases the debt-servicing burden remains a constant preoccupation of policy makers and international creditors. The "debt crisis" is entering its second decade.

Figure VII.1. Market bids on credits of 15 developing countries, 1986-1991




*Source:* UN/DIESA, based on data of Salomon Brothers, New York.

[1] The World Bank estimated 1990 trading volume at $65 billion (*Financial Flows to Developing Countries, Quarterly Review*, March 1991, p. 9). This compares with potentially tradable debt of countries in the market — i.e., medium-term and long-term bank debt that is not covered by creditor government guarantee — of under $240 billion (as per the data of OECD, *External Debt Statistics*).

[2] Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, Venezuela and Yugoslavia.

[3] Two members of the 15-country group are no longer traded, namely, Bolivia and Uruguay; the other countries for which bids are regularly quoted on bank debt or related bond instruments are Costa Rica, Panama, Poland and Zaire (data of Salomon Brothers, New York).

## Policy on debt owed to multilateral creditors

The international community has had two distinct policies on official debt: on the one hand, obligations to multilateral institutions must be serviced in full and are never formally restructured; on the other hand, debts owed directly to Governments — whether originally for export credits, official development assistance or military sales — are readily renegotiated and sometimes simply cancelled. Debtor Governments have generally sought to stay current on their multilateral obligations, but it has not always proved possible.

One reason for the difference in treatment is that the multilateral institutions other than IMF obtain most of their resources not from Governments but from the financial markets in which the bonds of the institutions are sold. Governments are the shareholders of the institutions and contribute the capital, most of which is not even paid in. It is thus essential to the normal working of the institutions that the market maintain full confidence in the institutions and give them high credit ratings so that relatively low rates of interest can be charged on their bonds.

IMF operates differently in that all its resources — whether contributed as part of quotas in the Fund or lent to it — are provided by Governments. It is imperative, however, particularly as concerns the general resources that derive from quota subscriptions, that they be perceived as risk-free; the "reserve tranche" must be available for use by members on demand and the availability of other resources to Governments through Fund arrangements must not be compromised. The shareholders in IMF thus also make no provision for rescheduling obligations.

If a country allows arrears to accumulate to IMF and other multilateral financial institutions, it must be in an extremely tight financial situation, as it virtually precludes being able to arrange any other medium- or long-term financing.[4] Nine countries have nevertheless built up arrears to IMF that totalled $4.6 billion as at 31 January 1991.[5] Whether the balance-of-payments crisis that produced the arrears had its source in external or domestic causes, recovery from such depths is almost impossible without either a major improvement in the terms of trade, which would be highly unusual, or international assistance.

Creditor Governments now seem increasingly forthcoming in mobilizing assistance for countries with substantial arrears to multilateral institutions. The *quid pro quo* is seeing the Government of the debtor country enter upon an economic adjustment programme that the creditors believe will lead the country to economic recovery. Steps towards political liberalization and international policy concordance are also important to many of the Governments that make the decisions of IMF and the other multilateral financial institutions in their executive board meetings. Arrears are temporarily almost forgotten and then cleared with grants or new lending.

In the case of arrears to IMF, a detailed set of arrangements is currently available to countries that seek to cooperate with the Fund. In essence, although the country is ineligible for a formal IMF adjustment programme, it undertakes to implement policy changes that adhere to the standards of an IMF programme. The Fund is barred from providing financial assistance, but it can be supplied by individual Governments.

Under the newest arrangement, endorsed by the Interim Committee of the Fund on 8 May 1990, countries commit themselves to three-year programmes comparable to those usually supported by drawings from the Extended Financing Facility or the Enhanced Structural Adjustment Facility (ESAF) and IMF agrees to monitor the programme. During the period of these programmes, the country is said to accumulate "rights" to future IMF lending so that at its end, the rights would be converted into the first drawing under a successor IMF adjustment programme and those funds would be used to clear part of the arrears; subsequent drawings would clear the rest. The total amount of "rights" is determined at the beginning of the programme and can be up to the full amount of arrears at that time (which means the country is expected at least to meet the originally scheduled debt-servicing obligations falling due during the period).[6]

The importance of the rights-accumulation programme lies in that it sets a timetable for the country in arrears to regain its good standing in the Fund. It does not itself provide resources to clear the arrears or for balance-of- payments support. A method that does was used for Guyana, the first arrears case to be settled under the Fund's "intensified collaborative approach". Resources for Guyana's adjustment programme and to repay Guyana's arrears to IMF, the World Bank and the Caribbean Development Bank were mobilized by a support group, chaired by Canada.[7] The funds were accumulated in an account administered by IMF (although, in fact, a bridge loan by the Bank for International Settlements helped provide resources to repay the arrears), and the Fund monitored Guyana's progress in adjustment. Guyana's economic recovery programme, originally prepared with the support of IMF and the World Bank, of necessity existed outside the usual channels.[8] With the repayment of arrears on 20 June 1990, Guyana again became eligible for multilateral lending, which was quickly arranged. In particular, by 13 July, the Executive Board of IMF approved a one-year stand-by arrangement and a three-year ESAF arrangement.

A variant of this mechanism was used for Zambia.[9] First, a Consultative Group of donors was convened regularly in Paris and Washington under the auspices of the World Bank. The Group helped generate bilateral financing for Zambia's adjustment programme and grants that were paid directly to the World Bank by Finland, Norway, Sweden and the United States to clear Zambia's arrears. Secondly, even though ineligible to

[4] Countries that are in arrears to virtually all their medium-term creditors are often still able to maintain short-term credit facilities, as long as arrears do not accumulate on these. Countries in the most dire situations would have to contract all trade on a cash or barter basis.

[5] Cambodia, Liberia, Panama, Peru, Sierra Leone, Somalia, the Sudan, Viet Nam and Zambia (*Financial Statements of the International Monetary Fund*, quarter ended 31 January 1991, p. 16).

[6] For additional details, see IMF, *Annual Report, 1990* (Washington, D.C., August, 1990), p. 58.

[7] The group also included France, Germany, Italy, Japan, Sweden, Trinidad and Tobago, the United Kingdom, the United States and Venezuela.

[8] For a description and background of the programme, see Inter-American Development Bank, *Economic and Social Progress in Latin America, 1990 Report* (Washington, D.C., Johns Hopkins University Press, October 1990), pp. 122-125.

[9] This account is based, in part, on information supplied by the World Bank.

borrow from the Fund or the Bank, Zambia could employ a mechanism whereby the Executive Boards of both institutions could endorse the policy framework for an adjustment programme which the bilateral participants in the Consultative Group could then support financially. This is the Policy Framework Paper (PFP), which is a medium-term programme that must be prepared in conjunction with the Fund and the World Bank by each low-income country prior to a drawing from the Fund's Structural Adjustment Facility (or the Enhanced Structural Adjustment Facility) or — before its expiration — the Bank's Special Facility for sub-Saharan Africa. In fact, the PFP is also meant as a framework for other lending and for use by the donor community in formulating official development assistance operations. The PFP states the main economic policy objectives over three years and the specific measures to be taken each year to reach them. It also assesses external financing needs and possible sources of financing, which in Zambia's case had to entail three components: concessional assistance arranged through the Consultative Group, rescheduling of debt to official creditors, and arrears to IMF and the World Bank. Once endorsed by the Boards of the Fund and the Bank, it could serve — indeed, did serve for Zambia — as the framework for coordinating donor assistance.

Thus, in September 1989, more than two years after a break with the Fund and the Bank over adjustment policy and external financial assistance, IMF and the World Bank approved a Zambian PFP. As in the case of Guyana, Zambia also adopted a "Fund-monitored programme", in which IMF would monitor its performance against agreed benchmarks, though without providing any financial support. Then, based on the PFP and progress under the Fund-monitored programme, assistance and a financing plan for clearing the arrears were approved by the Aid Consortium, and debt owed to bilateral creditors was rescheduled on concessional terms.[10]

In early March 1991, arrears to the Bank amounted to about $320 million. Bilateral support enabled Zambia to repay about $120 million and reduce arrears to IMF by $125 million. The rest of the arrears to the World Bank were cleared, in essence, with the Bank's own credits, but in fact with a bridge loan from the Bank of England.[11] Arrears to IMF remain, but a "rights accumulation" programme was agreed in April, which will enable these arrears to be cleared over a three-year period.

Another meeting of donors in Paris pledged additional support and some bilateral debt was written off. Nevertheless, the economic difficulties facing Zambia, which are largely structural in nature, remain acute.[12] But at least multilateral arrears that could not be rescheduled or written off have indirectly been rescheduled or written off.

## Policy towards bilateral official debt

The past few years have witnessed important changes in the restructuring of debt owed to individual Governments. Some debt has been cancelled outright but most has been rescheduled, some of that with partial forgiveness. For the most part, the cancelled debt had been provided as official development assistance, and much of it originated during the 1970s or before. As aid was increasingly being provided as grants or on grant-like terms, donors agreed in 1978 to retroactively adjust the terms of outstanding concessional debt owed by poorer countries, in particular the least developed.[13] By 1988, approximately $7 billion in debt relief had been granted under these terms.[14] Subsequently, commitments for additional debt relief were made by OECD member Governments and the Soviet Union, and by October 1990, the total amount of cancelled debt, based on data reported to the World Bank, came to $10.7 billion.[15] The sum of such debt forgiveness will grow further, as countries continue to implement their commitments and as new commitments are made. Indeed, before the end of 1990, the Commission of the European Communities proposed to the European Council a write-off of about $2 billion of debt owed to the European Community by the African, Caribbean and Pacific countries that are associated with EC under the Lomé IV agreement. In addition, about another $2 billion in resources that had yet to be disbursed under preceding Lomé conventions would be provided as grant assistance instead of loans under the Commission's proposal.[16]

### The Paris Club

Rescheduling, as opposed to writing off debt, is usually negotiated in the Paris Club, an informal grouping of creditors that meets at the French Treasury, principally to ensure that all the creditor Governments give equivalent concessions. The frequency of Paris Club meetings, as well as the amounts of debt consolidated, have markedly increased in recent years, while Paris Club practices have significantly evolved as well.

Twenty-four meetings were held with developing countries at the Paris Club in 1989 and 17 in 1990, against an annual average of 16 during the period 1983- 1988. As the consolidation period — that is, the period in which debt service payments to be rescheduled originally fell due — has so far generally been between 12 and 18 months, many debtor countries have had to seek repeated reschedulings. Thus, in 1989 and 1990, of the 37 rescheduling countries, 16 had rescheduled at least three times

[10] That is, Zambia was accorded "Toronto terms" by the Paris Club in July 1990 (see below for a discussion of recent Paris Club practices).

[11] More precisely, on 5 March, the Executive Board of the Bank expressed its support of Zambia's structural adjustment programme by approving $237 million in IDA credits, subject to Zambia clearing its arrears. On 13 March, the bridge loan was signed and disbursed, the arrears cleared, the new adjustment credits were signed and declared effective and disbursements made, enabling Zambia to repay the bridge loan in a matter of minutes.

[12] For the World Bank's assessment, see *Trends in Developing Economies, 1990* (Washington, D.C., World Bank, 1990), pp. 610-613.

[13] See *Official Records of the General Assembly, Thirty-third Session, Supplement No. 15* (A/33/15 and Corr. 1), vol. I, part two, annex I, resolution 165 (S-IX).

[14] See UNCTAD, "Debt and managing adjustment" (TD/B/C.3/234), para. 19.

[15] For a full accounting, see World Bank, *World Debt Tables, 1990-91* (Washington, D.C., December 1990), pp. 76-99.

[16] Information supplied by the Commission of the European Communities.

in the preceding five years. Furthermore, as debt service difficulties persisted in most countries with repeated reschedulings, it became increasingly difficult for the Paris Club to avoid rescheduling previously rescheduled debt (PRD). Over the past three years, PRD was consolidated in 90 per cent of the cases.[17] The amounts rescheduled increased from an annual average of about $5 billion in 1984-1985 to $12 billion in 1989- 1990 (see table A.36).

In addition, multi-year rescheduling agreements (MYRAs) were concluded in 1989-1990, though for a limited number of countries, after a hiatus of several years. The initial experience with MYRAs in 1985-1986 had been unsatisfactory and none were fully implemented, owing to adverse external developments, inability to meet policy targets and lack of anticipated new commercial bank lending.[18] In 1989-1990, however, there was a return to two- to three-year agreements for eight countries. The MYRAs were granted in conjunction with multi-year IMF arrangements: two under the Extended Facility (Mexico and the Philippines), two under the Structural Adjustment Facility (Mali and Togo) and four under the Enhanced Structural Adjustment Facility (Bolivia, Guyana, Mozambique and the Niger). The return to multi-year agreements reflected a desire to provide a clearer financial framework for medium-term adjustment programmes and reduce the number of negotiations required of countries having multi-year Fund programmes.[19]

Paris Club practices have improved in other ways as well in recent years, most notably following the Toronto agreement on concessional debt relief for low-income countries.[20] In the past three years, severely indebted low-income countries benefited from the so-called "Toronto terms" in their Paris Club debt reschedulings. Between October 1988 and March 1991, 20 countries rescheduled their official debt on Toronto terms. Of these, 18 were sub-Saharan African countries included in the World Bank's Special Programme of Assistance.[21] Bolivia was the first country outside sub-Saharan Africa to obtain Toronto terms in March 1990, followed by Guyana in September. To date, all beneficiary countries have been those that are eligible for financing from the World Bank only through the highly concessional International Development Association ("IDA-only" countries).

The Toronto terms marked a major advance in the debt strategy since, for the first time, creditor Governments accepted the principle of concessional relief on non-concessional debt. However, their impact on the financial situation of developing countries is limited because of the low concessionality of the scheme. The overall grant element for the beneficiary countries has been about 20 per cent on average; that is, if the repayment obligations were broken up into an equivalent loan on commercial terms plus a grant, the grant would come to 20 per cent of the total. This is less than one quarter of the average grant element in new financial flows from official sources to severely indebted low- income countries. Another problem relates to short consolidation periods which have led to repeated, time-consuming reschedulings. Furthermore, some creditors finance the cost of debt relief by the transfer of funds from their aid budgets, so the net gain for the recipient is even less.[22]

As a result of the growing perception of the inadequacy of the Toronto terms, some creditor countries have recently put forward bold proposals giving further impetus to the principle of debt reduction for low-income countries. At the Second United Nations Conference on the Least Developed Countries in September 1990, the Netherlands called for the cancellation of all official bilateral debt owed by the least developed and other low-income countries facing severe debt problems. The cancellation would be gradual and conditional on the implementation by debtor countries of sound economic policies in the context of IMF programmes.

At the meeting of Commonwealth Finance Ministers held in Trinidad in September 1990, the United Kingdom proposed that (a) the Paris Club should reschedule the total stock of eligible debt in a single operation, rather than in tranches; (b) creditor Governments should cancel two thirds of the stock of debt; (c) the remaining debt should be rescheduled over 25 years, including five years of grace; and (d) interest payments should be capitalized for the first five years. The proposal also suggests a flexible repayment schedule linked to the debtor country's export capacity. Eligibility for this scheme, known as the Trinidad terms, would be the same as for the Toronto terms.

For many low-income countries, the Trinidad terms — carrying a grant element of about 67 per cent — would eliminate the costs associated with repeated reschedulings and, by lifting the debt overhang, they would create stable incentives for adjustment and investment. It should be noted, however, that the United Kingdom proposal (like the Toronto options) excluded from rescheduling all debt contracted after a certain date fixed by the Paris Club, known as the cut-off date.[23] In some countries, post cut-off date debt accounts for a large share of total debt owed to Paris Club creditors. Moreover, in a number of countries, Paris Club debt constitutes a relatively small portion of official debt, with debt owed to non-Paris Club bilateral credi-

[17] *Excluding countries rescheduling for the first time. In some cases, PRD was, however, consolidated only partially.*

[18] See World Bank, *World Debt Tables, 1989-90* (Washington, D.C., December 1989), vol. 1, pp. 60-61.

[19] See Michael Kuhn with Jorge Guzman, *Multilateral Official Debt Rescheduling: Recent Experiences* (Washington, D.C., IMF, November 1990), p. 12.

[20] Following the Toronto summit of seven major industrial countries in June 1988, the Paris Club adopted a menu of options to be chosen by creditor countries in rescheduling the official debt of low-income countries. For non-concessional debt, it was agreed that creditor countries could choose between (a) partial write-offs: one third of debt service due during the consolidation period is cancelled; the rest being rescheduled with a 14-year maturity including an eight-year grace period, and at market interest rates; (b) longer repayment period: debt service is rescheduled at market interest rates with a 25-year maturity, including 14 years of grace; and (c) concessional interest rates: debt service is rescheduled at market interest rates reduced by 3.5 percentage points or 50 per cent, whichever is lower, and with a 14-year maturity, including eight years of grace. As to official development assistance loans, it was agreed that a 25-year maturity, including 14 years of grace, would be applied, and that the interest rate would be at least as low as the original rate.

[21] Benin, Burkina Faso, Central African Republic, Chad, Equatorial Guinea, Guinea, Guinea-Bissau, Madagascar, Mali, Mauritania, Mozambique, the Niger, Senegal, Togo, Uganda, United Republic of Tanzania, Zaire and Zambia.

[22] For a more detailed evaluation of the Toronto terms, see UNCTAD, *Trade and Development Report, 1989* (United Nations publication, Sales No. E.89.II.D.14), box 7.

[23] The intention was to speed the return of borrowers to new official financing by assuring creditors that their new loans — those extended after the cut-off date — would not subsequently be rescheduled. The cut-off date has usually been three to 12 months before the date of the first rescheduling agreement; the practice has been to maintain it unchanged in all subsequent reschedulings.

tors and multilateral institutions accounting for the lion's share. The extent to which the external payments situation of such countries would improve depends, naturally, on the treatment granted by official creditors outside the Paris Club.

The official debt burden also poses a serious problem to a number of middle-income countries and has recently received increased attention from creditor Governments. Following the recommendations of the Houston summit in July 1990, the Paris Club began to apply a more favourable treatment to lower middle-income countries with high levels of official debt. To date, the Congo, El Salvador, Honduras, Morocco and Nigeria have benefited from this initiative. The new treatment consists of a lengthening of repayment terms, whereby (a) official development assistance (ODA) loans are rescheduled with a 20-year maturity, including up to 10 years of grace; and (b) export credits and official loans other than ODA are rescheduled with a 15-year maturity and up to eight years of grace. In conventional reschedulings, in contrast, the maturity and grace period are normally 10 and five years, respectively.

The new Paris Club treatment also includes, as a major innovation, the possibility for creditor Governments to sell or swap ODA loans as well as non-concessional credits through debt-for-nature, debt-for-aid, debt-for-equity, or other local currency-for-debt conversions. A ceiling has been fixed on the amount of non-concessional loans that can be converted (usually 10 per cent of the outstanding claims or $10 million, whichever is higher).

In June 1990, the President of France announced measures to lower interest rates on non-concessional loans by France to four middle-income countries of sub-Saharan Africa (Cameroon, the Congo, Côte d'Ivoire and Gabon). At the same time, the President of the United States launched a programme that would reduce the official debt obligations of Latin American countries to the United States, within the framework of the "Enterprise for the Americas Initiative" dealing with the region's trade, investment and debt.

In the case of the Unites States initiative, a substantial cancellation of concessional loans and the payment of interest in local currency is envisaged, which may be used to support environmental and other projects.[24] Furthermore, a portion of non-concessional official loans (such as export credits) would be sold in the secondary market in order to facilitate the conversion of debt into equity in private enterprises and debt-for-nature swaps (for the mechanisms involved, see section below on buy-backs and swaps). In the context of Latin America's overall debt burden, which is mainly to private creditors, the amounts potentially involved are small, amounting to less than 5 per cent of the total (and less than 2 per cent of interest payments). But for the countries whose debt to the United States Government represents a significant share of their total debt, the United States initiative may help bring about a meaningful reduction in their debt burden.[25]

The requirement that a rescheduling country conclude a prior arrangement with IMF continues to be an essential feature of Paris Club practices. While having a Fund programme entails having a multilaterally agreed financing framework within which the Paris Club relief plays a role, it does require that the debtor Government and the Fund be able to come to an agreement on necessary policy adjustments.

Sometimes Fund negotiations are difficult and protracted. When this happens, it delays debt rescheduling, which, in turn, worsens the country's external financial position.[26] The result is that arrears grow larger, the practice of incurring arrears becomes more common and the difficulty of extracting the debtor from its debt crisis becomes more complicated and ultimately more costly when the arrears have to be capitalized as new debts to service.

## Negotiations with international commercial banks

Debt reduction and interest relief became part of international policy towards commercial bank debt with the launching of the new international debt strategy, informally known as the "Brady Plan", after the Secretary of the Treasury of the United States who proposed it in 1989. The initiative is centred on voluntary, market-based debt and debt-service reduction with the support of the multilateral financial organizations and other official creditors. The extension of new loans and rescheduling of repayments are also elements of the strategy. Debt relief is negotiated on a case-by-case basis with Governments whose economic policies are approved by the World Bank or IMF. The initiative dominated commercial bank debt negotiations in 1990. Agreements were reached with Costa Rica, Mexico, Morocco, the Philippines, Uruguay and Venezuela. Outside that framework, only a few reschedulings were negotiated last year.

### Agreements under the Brady Plan

One of the characteristics of the negotiations concluded so far is the diversity of instruments contained in each restructuring agreement. This reflects the need to attend to diverse objectives of debtors and creditors and, to some extent, an increased flexibility of all players involved.

The **Philippine** agreement, for example, had two main components: debt reduction via a buy-back operation and new money. Approximately $1.3 billion of commercial bank debt were tendered for cash at 50 per cent of its face value and about $700 million were obtained as new money.

In the agreement that **Mexico** concluded with its creditors, commercial banks were given the choice of converting their

[24] In October 1990, the Congress of the United States passed legislation authorizing the reduction of PL-480 loans (for food aid) that were outstanding as at 1 January 1990. Eligible debt represents about 15 per cent of the total official debt due by Latin America and the Caribbean to the United States.

[25] This applies in particular to Bolivia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Haiti, Honduras and Jamaica.

[26] The linkage with IMF conditionality has become tighter in some cases recently, as the implementation of the rescheduling agreement has been phased and made contingent upon the debtor countries meeting performance criteria under the IMF arrangement.

claims into bonds or extending new loans amounting to 25 per cent of their exposure (banks holding 10 per cent of eligible debt chose this option). The eligible debt that was not converted into the new bonds was rescheduled over a 15-year period, with seven years of grace before principal repayments begin, and carried an interest rate of LIBOR plus 13/16 of a percentage point.[27] Two types of bonds were offered: a par bond carrying an annual fixed interest rate of 6.25 per cent and a discount bond at 65 per cent of par carrying a floating market-based interest rate, LIBOR plus 13/16 percentage points. Forty-seven per cent of creditors chose this first bond option and 43 per cent the second. Both bonds had their principal repayments collateralized by zero-coupon bonds issued by the United States Treasury that will mature when the bonds have to be redeemed, while interest payments are guaranteed for 18 months.[28]

**Costa Rica**'s financial package consisted of a substantial buy-back (including bank claims arising from interest arrears), some rescheduling of interest arrears and debt conversion operations. Approximately $1 billion worth of debt was retired at 16 per cent of its face value. This corresponds to 62 per cent of the debt subject to renegotiation. The remaining portion of it was converted into par bonds carrying an annual fixed interest rate of 6.25 per cent. Banks that were owed interest arrears that were not extinguished via the buy-back (39 per cent of the total) received a cash payment equivalent to 20 per cent of the arrears owed, and the balance was rescheduled as a 15-year loan at an interest rate of LIBOR plus 13/16 percentage points. Creditors that tendered more than 60 per cent of their original claims for cash were rewarded with a one- year rolling interest guarantee facility that collateralizes payments on their bonds. For banks that exchanged at least 60 per cent of their overdue payment for cash at the heavy discount, the remaining arrears were rescheduled with guarantees covering 36 months of interest payments.

**Venezuela**'s agreement introduced new instruments and presented the country's creditors with a greater range of choices than the previously described negotiations. Banks were given five options:

(a) Discount bonds at 70 per cent of face value, carrying a floating interest rate of LIBOR plus a spread of 13/16 percentage points (9 per cent of eligible debt was converted to these bonds);

(b) Par bonds bearing a fixed annual interest rate of 6.75 per cent (38 per cent of loans were treated this way);

(c) Bonds with temporarily reduced interest, the so-called "step-down, step-up" bonds, which have a fixed interest rate of 5 per cent during the first two years, 6 per cent in the following two years and 7 per cent in the fifth year, after which they will pay LIBOR plus 7/8 percentage points (15 per cent);

(d) A buy-back operation (7 per cent) which took the form of an exchange of debt for fully collateralized 91-day bills at a 55 per cent discount;

(e) Rescheduling of debt by which creditors convert claims into new government bonds, with 17-year maturity and seven years grace, at an interest rate of LIBOR plus 0.875 per cent (31 per cent). This option, however, also requires participating banks to make fresh loans. These loans take the form of bonds whose spread and maturity depend upon the issuer. Bonds issued by the Central Bank of Venezuela have a 15-year maturity and a spread of 7/8 percentage points, while bonds of the Republic of Venezuela mature in 17 years and pay a spread of 1 per cent. Both have a grace period of seven years.

Venezuela's par and discount bonds have principal repayments fully guaranteed by zero-coupon bonds of the United States Treasury, while interest payments are collateralized for 14 months. "Step-down, step-up" bonds offer 12-month interest payment guarantees during their first five years.

In December 1990, **Uruguay**'s commercial bank creditors chose from the options made available in their negotiations. The package covers all the country's medium-term and long-term bank debt and consists of debt conversion, a buy-back operation and new money. Banks holding 39 per cent of the debt will tender their claims for cash at a 44 per cent discount. Another 33 per cent of the debt will be converted into 30-year par bonds carrying a fixed annual interest rate of 6.75 per cent. Principal repayments on these bonds will be backed by United States Treasury zero-coupon bonds, while interest payments will be guaranteed for 18 months. Finally, those not participating in either option will extend new loans to Uruguay corresponding to 20 per cent of their present exposure at a market rate plus 1 per cent over the next four years. These new loans will mature in 15 years and have a grace period of seven years.

**Morocco**'s agreement with its bank creditors has two phases. The first one, already implemented, consisted of a rescheduling of all its long-term debt, including previously restructured bankers' acceptances (a type of trade finance). Phase two is conditional on the approval of an Extended Arrangement with IMF before 31 December 1991. It will give banks the following options: (a) a buy- back operation at a price to be set by Morocco; and (b) conversion of debt into par bonds. Two instruments will be offered. First are bonds with temporarily reduced interest that will carry an annual fixed interest rate of 6.625 per cent during their first six years and LIBOR plus 13/16 percentage points from the seventh year on. These bonds mature in 20 years and have a grace period of 10 years. Second are bonds with a fixed annual interest rate of 6.75 per cent, 10-year maturity and no grace period. Both bonds will have interest payments collateralized for 12 months by a rolling fund. Banks that choose not to participate in either of the above are expected to extend new loans in an amount equivalent to 15 per cent of their current exposure. The new money will bear a floating market-based interest rate plus 13/16 percentage points.

In March 1991, **Nigeria** and its commercial bank creditors reached an agreement in principle to restructure $5.8 billion of bank debt. It offers three options: (a) a debt buy-back at a price that is likely to be close to the country's debt paper quotation

[27] LIBOR, the London interbank offered rate, is a rate banks charge each other for low-risk funds — usually for three-month or six-month dollar loans outside the United States. It is the most common fluctuating base interest rate for international borrowing. A "spread" is added to the base rate to reflect the perceived risk of the loan. Thus, based on the six-month dollar LIBOR of 7.31 per cent which prevailed in early January 1991, Mexico would have to pay an interest rate of about 8.12 per cent on its debt.

[28] Banco de México, Dirección de Organismos y Acuerdos Internacionales, *The Mexican Economy 1990* (Mexico, D. F., May 1990).

in the secondary market;[29] (b) registered bonds with fixed annual interest rates at 6.25 per cent;[30] and (c) registered bonds carrying LIBOR plus 13/16 per cent repayable in 10 years after a 10-year grace period.[31] The agreement also includes payment of about $300 million of interest arrears accumulated since March 1990 when Nigeria unilaterally reduced the annual rate of interest on debt to 3 per cent. It is not yet clear how banks will make their choices but, owing to the agreement, the quotation of Nigerian debt paper on the secondary market reached 42.5 cents in the last week of March 1991, up from 32 cents in November 1990. This will make it more costly for Nigeria to buy back its debt.

Despite the diversity of options for debt rescheduling and debt-service relief that these cases illustrate, the above packages have several features in common. All agreements are backed by the multilateral financial institutions which have made special concurrent loans that help, *inter alia*, to purchase the financial guarantee instruments, such as United States Treasury bonds.[32] All Latin American packages have recovery provisions under which banks would take back some of their concessions if the debtor countries become economically healthier. They are linked to the price of oil in the case of Mexico and Venezuela and to overall economic performance in the case of Costa Rica and Uruguay. Debt-service relief, in the form of reduced interest rates, is relatively homogeneous across countries. Fixed interest rates range from 6.25 to 6.75 per cent per annum.[33] Likewise, spreads charged differ very little from country to country, and they range from 0.81 to 1.0 per cent. Discounts on bonds are in the 30 to 35 per cent range, and the discount given usually reflects the amount of collateral available as well as the expected market value of the new bond.[34] Buy-back operations generally base the amount of the discount involved on the secondary market quotations.

### Limited impact of the Brady Plan agreements

Benefits for the countries concerned can be assessed in many ways. A central question is whether the Brady initiative provided these countries with enough debt reduction and debt-service relief so as to improve their credit- worthiness and speed their return to voluntary private lending. Closely related is the impact of debt service and debt reduction in facilitating the structural adjustment process and the resumption of economic growth by alleviating the foreign exchange constraint. Undoubtedly, these are complex issues and the agreements are fairly recent and have not yet had the chance to produce all their intended results. Indeed, for two of the seven agreements, those for Morocco and Nigeria, the banks have not yet revealed the proportions in which they will take up the different options. None the less, a preliminary and tentative assessment can be made of the five completed cases.

The Philippine agreement did not result in any net reduction of debt as the decrease brought about by its buy-back operation was offset by new-money loans, borrowing from official creditors and the use of the Philippines' own resources (see table VII.1). Likewise, the agreement failed to produce a net reduction in interest payments, but it did provide savings of about $115 million of principal repayments on the portion of the debt that was retired (see table VII.2). However, after a severe earthquake in July 1990 and losses associated with the Gulf crisis (discussed in chap. II), the debt-servicing capacity of the Philippines had to be reassessed and, indeed, the Philippines is negotiating further debt and debt-service reduction with its commercial and official creditors. A new stabilization programme was approved by IMF in February 1991 and will be supported by a stand-by arrangement, 25 per cent of which will finance debt reduction. Agreement with commercial creditors, however, has not yet been finalized.

Mexico's financial agreement also failed to provide the country with as much new money as it expected ($2.4 billion, if banks accounting for 20 per cent of the eligible debt would have chosen the new money option as was expected). Commercial bank debt did decrease by $6 billion as a consequence of the bond conversions, net of the extension of new loans, and by a further $2.6 billion owing to debt-equity swaps that were carried out within the framework of the financing package.[35] This corresponds to a 17 per cent reduction of the 1989 stock of debt owed to commercial banks. Net external debt, however, decreased by less than 2 per cent owing to the borrowing from official creditors and Mexico's use of its reserves (see table VII.1). Annual debt-service relief corresponds to 2 per cent of the 1989 gross national product, well below the 6 per cent relief the Government was aiming at, and most of it comes from the restructuring of principal repayments brought about by the conversion of the debt into 30-year bonds.[36]

Despite smaller than expected benefits, the agreement had a significant impact on the Mexican economy as it was perceived as an indication of the international community's support of the economic policies pursued by the Government and the need to

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[29] The order of magnitude of the price is suggested by bids of 44 cents on the dollar for Moroccan debt on the secondary market at the end of March 1991, according to data of Salomon Brothers, New York.

[30] Bonds are to be repaid in 2020 and have principal and 12 months of interest payments collateralized by United States zero-coupon paper.

[31] Banks that choose this option are expected to extend new loans to Nigeria amounting to 10 per cent of the total exchanged under this option. The new money facility will carry LIBOR plus a 1 per cent spread and a seven-year grace period after which principal repayments are scheduled over a period of eight years.

[32] Disbursements on a stand-by agreement that Costa Rica had negotiated with IMF were, however, suspended owing to the Government's failure to meet agreed fiscal targets. Support for the programme was eventually obtained from other sources and Costa Rica's own resources. Nigeria has also reached a stand-by agreement with IMF but will not draw on it to support its package with commercial banks. Resources for both the arrears and the buy-back will come from the country's own reserves.

[33] Outside this range are the Venezuelan "step-down, step-up" bonds whose interest rates average 5.8 per cent during the first five years.

[34] On the relationship between these variables, see Michael P. Dooley, "Self-financed buy-backs and asset exchanges", *IMF Staff Papers*, vol. 35 (December 1988), pp. 714-722.

[35] The $2.6 billion nominal reduction in commercial debt corresponds to the total $3.5 billion debt-equity swap authorized in the restructuring package. Only $2.6 billion of debt was cancelled because 65 per cent of the bonds accepted were those issued at a 35 per cent discount (the section on buy-backs and swaps below describes how swaps work).

[36] The $2.6 billion swap will bring additional annual savings of interest payments of about $200 million or 0.1 per cent of the 1989 gross national product. The equity investments will generate dividends, however, that will have to be repatriated, so the net interest saving here is indeterminate and is thus not added to the calculation in table VII.2.

Table VII.1. Debt restructuring under the international debt strategy: impact on the net stock of debt
(Millions of dollars)

| | Mexico | Costa Rica | Venezuela | Philippines | Uruguay |
|---|---|---|---|---|---|
| Debt reduction, via | | | | | |
| Discount bonds | 7 103 | .. | 539 | .. | .. |
| Buy-backs | .. | 1 000 | 1 411 | 1 337 | 628 |
| Subtotal | 7 103 | 1 000 | 1 950 | 1 337 | 628 |
| Minus new money | 1 130 | .. | 1 200 | 715 | 89 |
| Equals net reduction of bank claims | 5 973 | 1 000 | 750 | 622 | 539 |
| Minus funding of enhancements,[a] via | | | | | |
| Official loans | 5 700 | 188 | .. | 427 | .. |
| Use of own resources | 1 508[b] | 28 | 635[c] | 243 | .. |
| Subtotal | 7 208 | 216 | 2 223 | 670 | 454 |
| Equals net debt reduction | -1 235 | 784 | -1 474 | -48 | 85 |
| Plus debt-equity swaps[d] | 2 605 | | | | |
| Equals net overall debt reduction | 1 365 | 784 | -1 474 | -48 | 85 |
| Memorandum items | | | | | |
| Commercial bank debt reduction as percentage of 1989 bank debt[e] | 16.9 | 57.1 | 3.6 | 7.1 | 32.4 |
| Net overall debt reduction as percentage of 1989 long-term debt[e] | 1.7 | 22.5 | -5.8 | -0.2 | 2.8 |

*Source*: UN/DIESA, based on national and international sources.

[a] Including buy-back costs.
[b] Including use of revenues earned on guarantee fund.
[c] Resources already committed.
[d] Conversions were an explicit component of the Mexican agreement.
[e] Government and government-guaranteed debt.

Table VII.2. Debt restructuring under the international debt strategy: impact on annual debt service
(Millions of dollars)

| | Mexico | Costa Rica | Venezuela | Philippines | Uruguay |
|---|---|---|---|---|---|
| Interest[a] | | | | | |
| Payments in the absence of the plan[b] | 3839 | 130 | 1629 | 172 | 134 |
| Minus interest payments under the plan, of which | | | | | |
| Par bonds | 1404 | 29 | 504 | .. | 36 |
| Discounted bonds | 1071 | .. | 504 | .. | 36 |
| Temporarily reduced | .. | .. | 176[c] | .. | .. |
| Rescheduled debt | 367 | 8[d] | 493 | 63 | 37 |
| New money | 44[e] | .. | 84[c] | 58 | 7 |
| Subtotal | 2886 | 37 | 1360 | 121 | 80 |
| Minus interest payments on financing of enhancements[f] | 261 | 12 | 101 | 50 | 30 |
| Equals net interest savings | 693 | 81 | 167 | 1 | 24 |
| Principal | | | | | |
| Relief due to Swap/buy-back/rescheduling[g] | 2751[e] | 144[e] | 2225[c] | 115[e] | 116[e] |
| Memorandum items | | | | | |
| Interest savings as a percentage of total 1989 interest payments | 7.5 | 40.6 | 5.2 | .. | 7.1 |
| Total debt service relief as a percentage of 1989 GNP | 1.8 | 4.6 | 5.8 | 0.3 | 1.7 |

*Source*: UN/DIESA, based on national and international sources.

[a] Assumes LIBOR of 7.31 per cent, the level in early January 1991.
[b] Assumes rescheduling of eligible debt.
[c] Average of five years.
[d] Corresponds to capitalization of interest arrears.
[e] Average of four years.
[f] Costs refer only to buy-back and purchase of zero-coupon bonds.
[g] Principal repayments on bank debt that would have been made in the absence of the agreement.

reduce financial transfers abroad to facilitate the conduct of those policies. Confidence increased in the future of the Mexican economy both at home and abroad. Domestic interest rates fell from an average of 45 per cent in 1989 to an average of 35.6 per cent during the first 11 months of 1990 despite the increase in inflation. There was a perception that the Government could finance its deficit more easily since part of the expenditures had been reduced and less risk was associated with government paper. Lower interest rates would allow the resumption of investment by the private sector, thereby improving the prospects for growth.

Return of Mexican capital from abroad was estimated at $2 billion in 1989 and $3 billion in 1990. Foreign direct investment inflows did not react as much as hoped in 1989, despite liberalization measures,[37] and remained below the 1988 level. An increase was expected during 1990 as the country's privatization programme accelerated and the prospect of negotiating a free trade agreement with the United States increased (see chap. III). Yet, foreign direct investment reached $1.64 billion during the first three quarters of 1990, marginally lower than the $1.69 billion during the same period in 1989.

Mexican borrowers have regained some access to the international credit markets. Funds obtained are mostly company or project-oriented. Credit has been extended to state-owned enterprises by the floating of bonds in the European and the American markets. Yields on these bonds range from 11.4 to 13.5 per cent per year. Private companies' issues offer higher yields in the range of an annual 13.5 to 16.5 per cent, if not collateralized.[38] Co-financing facilities, usually with the participation of the International Finance Corporation, an affiliate of the World Bank, have also been extended to private companies, and pre-export loans have been made available as well. Spreads charged on these loans range from 1 5/8 to 3 per cent over LIBOR. Recently, the Mexican Government returned to the Eurobond market by issuing DM 300 million of five-year notes priced to yield 10.37 per cent, i.e., 2.5 percentage points higher than yields on AAA-rated government bonds with similar maturities. It marked the first time Mexico issued foreign public debt since 1982.[39]

All in all, Mexico is not out of the woods yet. Its trade deficit has grown to $2.5 billion in 1990 (up from $0.7 billion in 1989) despite higher oil prices, and it still has a substantial interest bill. The country thus had a deficit on current account of about $6 billion in 1990, even with the relief it obtained from the restructuring of its debt. While increased imports of capital goods contributed to the larger trade deficit, they also indicate a strengthening of the Mexican economy and the possibility of more exports in the future. None the less, the fact that the deficit has been largely financed by short-term capital inflows that can be easily withdrawn from the country suggests the possibility of instability if foreign investors' expectations reverse.[40]

Costa Rica's agreement provided that country with a substantial reduction of its commercial bank debt. About 60 per cent of the debt outstanding at the end of 1989 (including interest arrears) was retired by the buy-back operation. Total net debt reduction was also significant — particularly when compared to the other Brady Plan cases — at about 23 per cent. Total debt-service relief, when compared to payments originally due on Costa Rica's debt, corresponded to 4.6 per cent of the country's 1989 gross national product (see tables VII.1 and VII.2). The package thus alleviated Costa Rica's scheduled debt-service burden, but not its debt-related cash flow since the country had not been fully servicing the debt. In addition, the country has not regained access to private credit markets so far. The fact that many banks tendered their claims for cash and that the agreement did not include new money may indicate that the country's return to private voluntary lending will not happen in the near future. None the less, Costa Rica's long-term credit rating improved after the conclusion of the debt negotiations.[41]

The outcome of Venezuela's agreement seems to have been influenced by its coming to fruition at the time the Gulf crisis emerged. When oil prices rose, the prospects for the Venezuelan economy improved, and the Government ended up retiring much less debt than hoped for, as more creditors decided to retain their Venezuelan claims.[42] The buy-back option was the least popular one, with only $1.4 billion (7 per cent of bank claims) being retired. This compares to about $5.5 billion that the Government was expecting to cancel. Discount bonds were used to retire only 9 per cent of the eligible debt, while the new money option attracted $1.2 billion in fresh resources. Consequently, the impact of the restructuring on Venezuela's commercial bank debt was modest: it corresponded to a reduction of less than 4 per cent of the 1989 debt stock (see table VII.1). Venezuela actually increased its total net external debt position, given the need to use its own resources and borrow from official creditors to purchase the United States Treasury bonds used to guarantee repayment of the bonds. Savings of interest payments resulting from the agreement are equivalent to about 5 per cent of last year's total interest bill. As in the case for Mexico, debt-service relief was thus brought about mainly by the conversion of the medium-term debt into long-term instruments. This will save Venezuela an average of about $2.2 billion a year during the next five years, or 6 per cent of the country's 1989 gross national product.

Uruguay's agreement was the last one to be completed in 1990. Excluding the new money loans, commercial bank debt

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[37] These are described, for example, in *Inversión Extranjera Directa Banamex/Foreign Direct Investment Banamex* (Mexico, D. F., Banco Nacional de México, 1990).

[38] World Bank, *World Debt Tables...*, p. 35.

[39] In December 1990, for the first time since 1982, Mexico obtained a debt rating from Moody's Investors Services, a United States credit-rating agency. Although Mexico was rated below "investment grade", the rating is expected to enlarge the market for Mexican debt.

[40] During the first three quarters of 1990, Mexico's net capital inflows reached $8.7 billion, of which $5.2 billion were short-term capital (data of Banco de México, *Indicadores Económicos* (Mexico, D. F., January 1991), chap. IV, table 1).

[41] According to Political Risk Services, a United States rating agency specializing in less creditworthy countries that are not normally rated by Moody's, Costa Rica's risk was rated as B — up from B-minus — owing to the positive impact the agreement was expected to have on the country's balance of payments (see World Bank, *Financial Flows to Developing Countries, Quarterly Review* (September 1990), p. 8).

[42] Even before the crisis, bankers were reluctant to provide the country with substantial relief for they believed that the Government had the capacity to service its debt fully.

will be reduced by $628 million (the Government was hoping to retire about $1 billion) or 33 per cent of its medium- and long-term commercial bank debt in 1989. Total debt reduction, however, will be much smaller, at about 3 per cent. Only 33 per cent of the eligible debt will be converted into bonds carrying a reduced, fixed interest rate. As that rate is not far from the floating rate — according to market conditions prevailing in early January 1991 — savings of interest payments to be produced by the debt conversion are limited. Overall relief of interest payments amounts to about 7 per cent of the 1989 total interest bill. The restructuring of principal repayments and the buy-back, as in the other cases, will provide most of the relief in terms of reducing the total transfer of resources abroad.

### Conventional restructuring of bank debt

Debt restructuring also continued to take place in 1990 outside the Brady initiative, as several countries decided to avoid the long negotiations usually required to reach a debt-reduction package. Thus, Jamaica rescheduled $48 million of principal repayments falling due in 1990-1991. Some interest rate relief was obtained by a reduction of the spread from 1.25 per cent to 0.81 per cent.

Colombia reached an agreement in principle with its commercial creditors to refinance amortization coming due over the period 1991-1994. The accord contains two facilities. First is a syndicated loan amounting to $1.57 billion, which will pay interest at LIBOR plus a spread of 1 per cent. The loan will mature in 13 years and has a grace period of seven years. To cover those banks that will not participate in the refinancing, floating-rate notes amounting to $200 million will be issued during 1991-1993. The notes will mature in 1998 and will carry a margin of 1.5 per cent over LIBOR. The agreement follows the same pattern of past refinancings, with the exception that it covers a period of four years instead of the conventional two-year period of previous exercises. The present interest spread of 1 per cent, however, is somewhat higher than before.

In September 1990, Chile signed a restructuring agreement covering $4.6 billion of its debt with its commercial bank creditors, which will enable the country to lower principal repayments by almost $2 billion during the period 1991-1994. The rescheduling, however, will carry the same interest rates and margins as on the current debt. But, the country will continue to make interest payments on a yearly basis instead of the more conventional semi-annual payments. This will allow Chile to defer interest payments of about $200 million for the period 1991-1993.[43]

The agreement is important for Chile because it smooths out a hump in principal repayments it would otherwise have to honour. The Government's repayments to private creditors averaged $200 million during the period 1986-1989 and were estimated to reach an average of $1.1 billion during the period 1991-1994.[44]

An important feature of the agreement is the issuing of new bonds amounting to $320 million, which will be offered on a voluntary participation basis. They will not be prorated among banks participating in the rescheduling, as has traditionally been required, but rather subscribed by those banks that want to maintain their relationship with Chile. Bonds will carry a spread of 1.5 per cent over LIBOR, and will be placed in the Eurobond market, therefore marking Chile's return after eight years of absence.

In a related development, Chile secured its first voluntary sovereign bank loan since the beginning of the debt crisis in 1982. A $20 million loan was granted by a Dutch bank that recently established a subsidiary in Chile. The loan matures in eight years, with a grace period of three years, and carries a spread of 1 per cent over the three-month LIBOR. Funds will apparently be used to increase government expenditures on social services.

Though the amount of the Chilean loan is rather small, the fact that it represents the first voluntary loan to a heavily indebted country suggests that private creditors may resume lending to countries that are making progress in debt reduction and are following policies that are successful in maintaining macroeconomic stability and in eliminating price distortions in the economy. This does not mean that there is any prospect of a renewed lending boom to such countries. The mushrooming of commercial bank loans to sovereign borrowers during the 1970s was a characteristic of that particular period. Except for the financing of trade and collateralized projects (or ones with identifiable foreign exchange cash flows), banks have usually played a relatively minor role in financing developing countries. After the catastrophic experience of the 1980s, it seems more likely that banks will revert to their more traditional role. In fact, the vast majority of recent capital inflows to debtor countries have been obtained through the issuing of bonds that are, in many cases, fully collateralized. Other credits have been trade-related or project-oriented and have usually been backed by purchase contracts and other guarantees.[45]

### Debt reduction through buy-backs and swaps

Recent years have also witnessed an increase in the number of commercial bank debt reductions via buy-backs and debt swaps outside the framework of debt-restructuring negotiations. Debt-equity swaps were among the first instruments developed to reduce the stock of debt and the cost of servicing it.[46] The general structure of such operations is that a potential investor buys up some commercial bank debt on the secondary market at a discount and presents it to the central bank of the borrower country for an advantageous sum of domestic currency which is then invested.[47]

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[43] ECLAC, *Preliminary Overview of the Economy of Latin America and the Caribbean 1990*, Notas sobre la economía y el desarrollo, No. 500/501 (December 1990).

[44] Data of World Bank, *World Debt Tables...*, vol. 2 (Country tables).

[45] Salomon Brothers, "Capital flows to Latin America: the volume increases", *Memorandum to Portfolio Managers*, New York, 20 December 1990.

[46] Debt-equity swaps were already in use by some countries before 1988. The case of Chile is a prominent example. Debt conversions and buy-backs were also present in some of the negotiations held within the framework of the "market menu" approach in the mid-1980s (for details, see *World Economic Survey, 1989* (United Nations publication, Sales No. E.89.II.C.1), pp. 71-75).

[47] The structures, advantages and drawbacks to such schemes are discussed in United Nations Commission on Transnational Corporations, *Debt Equity Conversions: A Guide for Decision Makers* (United Nations publication, Sales No. E.90.II.A.22).

Generally, debt swaps involve private buyers of debt on the secondary market, but the debtor government could — with the cooperation of the creditor banks — arrange to buy back the debt directly. The most publicized case of this type was the arrangement for Bolivia in 1988 under which $272 million of debt were purchased at 11 cents per dollar of face value. The funds for the buy-back had been contributed by donor Governments.

Subsequently, the World Bank created a facility from $100 million of Bank profits that was to be used on a grant basis for the repurchase of commercial bank debt of low-income ("IDA-only") countries. The idea behind the facility was that, although low-income countries generally have small amounts of commercial bank debt, they might account for a substantial part of their debt servicing. Moreover, while such countries could reduce their inter-official debt through the Paris Club under the Toronto terms, the rescheduling that they were able to gain on their commercial bank debt was generally less advantageous than that obtained by larger, middle-income debtors. Given the discounts potentially available on such debt in the secondary market, even the maximum $10 million per country could make a significant contribution towards reducing their debt.[48] Indeed, 15 countries applied for its use as at early 1991. In a recent case, the Niger wiped out 99 per cent of its $108 million bank debt with $10 million from the facility and additional funding from France and Switzerland.

Other non-governmental swap mechanisms were also designed over the past few years, such as "debt for nature", "debt for education" and "debt for health". Debt-for-nature swaps were first introduced in 1987 when Conservation International, a non-governmental organization, raised $100,000 to cancel $650,000 of Bolivian commercial bank debt. The Government in turn established a fund in national currency equivalent to $250,000 to finance conservation activities.[49] Debt-for-nature swaps were also applied in Costa Rica, Ecuador, Madagascar, the Philippines and, recently, in Mexico. Amounts involved in these conversions have generally been small, although the Costa Rican case is an exception. Between 1987 and 1989 the country retired $72 million of its commercial debt through debt-for-nature swaps. This corresponds to almost 5 per cent of the commercial bank debt outstanding in 1987.

An innovative arrangement was launched when Harvard University acquired $5 million of Ecuadorian debt paper in the secondary market at an 85 per cent discount and donated them to *Fundación Capacitor*, an educational institute in Ecuador. The debt paper would then be traded for a certain amount of Ecuadorian Government bonds, and the profits from the sale of the latter would be used to finance scholarships and provide grants for study at Harvard.

Quantitatively more significant from the point of view of debt reduction is the increasing use of debt swaps to finance direct investment. According to recent World Bank estimates, debt-equity swaps retired about $34 billion of developing countries' commercial bank debt from 1985 to 1989, most of it in the latter two years.[50] Operations were largely concentrated in Latin American countries but they also were undertaken elsewhere, particularly in Nigeria and the Philippines. After reaching a peak in 1988, the pace of these conversions slowed somewhat in 1989. Because of their potentially adverse impact on inflation,[51] some countries imposed lower ceilings on the amount of authorized conversions. Others, such as Argentina, Brazil and Mexico — albeit temporarily in the latter country — suspended their programmes. This trend, however, was recently reversed; e.g., four Latin American countries (Argentina, Chile, Mexico and Venezuela) converted about $12 billion of their external debt into equity in 1990.[52] The same amount of conversions were performed in 1989 by 11 countries.

Mexico, as noted above, reinstated debt conversions under the terms of the agreement it negotiated with its commercial bank creditors, and all $3.5 billion of conversions allowed by the accord during a period of three and a half years were carried out in 1990. Venezuela has recently introduced some changes in its debt-equity swap programme so that investments could be more easily channelled into large projects in five priority areas (petrochemicals, aluminium, pulp and paper, infrastructure and tourism). Accordingly, a $1.2 billion aluminium project was recently approved by the Venezuela cabinet, of which debt-equity swaps will finance $372 million of the total investment. The Government has also suggested it might lift the annual $600 million ceiling it currently imposes on debt-equity conversions.

Another mechanism for debt reduction refers to what could be called a "debt-for-debt" swap. It has been used in some of the restructurings of the bilateral official debt owed to Brazil. In this arrangement, the debtor Government buys Brazilian commercial debt paper in the secondary market at a discount and swaps it at full value for its own debt to Brazil. This exercise has been applied in the negotiations Brazil held with Bolivia, Guyana and Paraguay and was the means by which these countries were able to reduce substantially or completely retire their debt to Brazil.

Despite the progress some countries have made in reducing their external debt via conversions, these operations may create other problems for the country concerned. In the debt-for-equity swaps, the Government may either pay in cash for the debt papers presented, or it may issue investment certificates or other bonds to finance equity investment. Conversions of external debt may thus substitute domestic public debt for foreign and this, too, needs to be serviced. The net budgetary gain would depend, among other things, on the discount at which the Government converts the debt. Moreover, although debt-equity operations may be an inflation threat, this need not be the case, particularly those related to the privatization of state-owned enterprises. In those cases, money is not usually created, but instead assets are exchanged. This may be one of the reasons that swaps are increasingly being used to finance privatization programmes.[53]

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[48] For details of the programme's operation, see World Bank, *Annual Report 1990* (Washington, D.C., 1990), pp. 52-53.

[49] M. Potier, "Swapping debt for nature", *The OECD Observer* (August/September 1990), pp. 17-20.

[50] World Bank, *World Debt Tables...*, p. 64.

[51] Under a swap, as the central bank issues domestic currency in exchange for debt instruments, there is a possibility that the money supply might grow by more than targeted amounts.

[52] See ECLAC, *Preliminary overview...*, p. 19.

[53] See report of the Secretary-General on transnational banks and debt-equity conversions (E/C.10/1991/5), 26 February 1991.

Debt-for-equity swaps have been used extensively in Chile's privatization programme. Until mid-1989, about 25 per cent of swaps authorized under chapter XIX of the Compendium of Rules on International Exchange of the Central Bank of Chile involved the sale of state enterprises. In the Philippines, privatization has been absorbing 27 per cent of the debt-equity conversions. But the largest privatizations to date involving debt-equity swaps were implemented by Argentina in 1990. They refer to selling the state telephone company and the air carrier. Both arrangements required the new owners to make cash payments, guarantee future investment in the companies concerned and clear their stock of external debt and related interest arrears. The telephone company arrangement cancelled $5 billion of Argentine debt, including more than $900 million of overdue interest, while the airline package will allow for the retirement of $2 billion of debt, of which $400 million are interest arrears. Together, these privatizations allowed Argentina to cancel 11 per cent of the debt owed to commercial banks. For the commercial creditors, their direct participation in the productive sector of a debtor country is a means not only to clear non-performing debts but also provides an opportunity to eventually recover part of their losses from the income to be generated by the company in which they have a stake. Furthermore, commercial creditors may find it easier to sell equity shares of an operational company than non-performing assets.

Finally, there are some indications that debt-equity conversions may have helped to increase capital inflows to debtor countries by inducing additional foreign direct investment, although the amount of net investment gain is highly controversial owing to the difficulties in estimating how much investment would have occurred otherwise.[54] In any event, these operations are not without cost in terms of foreign currency, as profit and dividend remittances may generate pressures on the country's balance of payments in the future. In many cases, profits tend to rise in synchronization with the country's ability to pay, so the problem does not arise, but the desire of firms to repatriate their investments when a country passes through a difficult period can create problems. These are, however, no worse — and no less — than the problems created by domestic capital flight during times of economic stress.

### Interest arrears and pending negotiations

The progress achieved by some countries in reducing their debt overhang has been paralleled by an increase in the amount of interest arrears of others.[55] Though arrears have been cleared by some countries through the restructuring of their debts, the situation has significantly deteriorated in other countries. Argentina and Brazil are the two largest cases in point.

Argentina has been accumulating arrears of interest payments since April 1988, while Brazil did not pay interest on its commercial bank debt for 18 months beginning in June 1989. The former has been making symbolic interest payments of $40 million per month since August 1990, therefore vouching for its willingness to negotiate with its commercial creditors, but has not conducted any formal rescheduling negotiations with the banks. The latter resumed some interest payment in 1991 and in April 1991 reached an agreement with its commercial creditors on how to settle the unpaid interest.

In both countries, arrears have accumulated despite a substantial surplus in their trade balance. This underlines the fact that foreign exchange availability, although necessary, is not a sufficient condition to guarantee debt servicing. As most of the commercial debt of these countries is owed directly or indirectly by the Government, the servicing of the debt is also constrained by the ability of the State to finance such a payment domestically, particularly when it does not generate foreign currency itself. In other words, the Government needs resources to finance the acquisition of the foreign currency surplus from the private sector. Consequently, the external transfer of foreign currency must correspond to an internal transfer of resources from the private sector to the Government.[56] The Governments of these countries have had limited success in increasing tax revenues and cutting expenditures to the extent needed for fiscal balance, so the transfer has been effected through the acceleration of inflation caused by the expansion of government debt. In a situation in which important social and economic needs cannot be addressed through the budget, servicing the debts owed foreign creditors — especially when interest payments on these debts have been so high in the past — understandably are given a low priority.

In the case of Brazil, the transfer problem is compounded by the decreased flexibility in arranging fiscal resources. With the adoption of a new constitution in 1988, the federal Government lost some degree of freedom to allocate fiscal revenues because the new revenue-sharing arrangement shifts the resource balance in favour of the States and municipalities. In fact, 29 per cent of the Treasury's revenues were channelled to the local governments during the first nine months of 1990, while only 17 per cent were transferred during the same period in 1989.

For these reasons, Brazil attempted to introduce into negotiations with its bank creditors the concept that the country's ability to service its foreign debt should be defined in terms of its fiscal stance. The Brazilian Government proposed, among other things, that the payment of interest on external debt be conditional on the existence of a surplus in the central government primary budget, i.e., the balance excluding interest payments. A comfortable level of international reserves and available foreign finance are additional elements that define capacity to pay. Defined this way, the Government estimated its capacity to pay at $1.2 billion in 1991 and under $1 billion in 1992, well below the $5 billion of interest payments accruing on the debt during

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[54] For details, see report of the Secretary-General on transnational banks and debt-equity conversions (E/C.10/1991/5) and Sebastian Edwards, "Capital flows, foreign direct investment and debt-equity swaps in developing countries", *National Bureau of Economic Research Working Paper*, No. 3497, October 1990.

[55] Interest arrears by the severely indebted middle-income countries reached $27.5 billion in 1989, 50 per cent higher than the 1988 level, and were estimated to amount to $36.2 billion last year (World Bank, *World Debt Tables...*, p. 158).

[56] See report of the Secretary-General on net transfer of resources from developing countries (A/45/487), 11 October 1990.

those years.[57] Banks did not accept the Brazilian proposal as a basis for negotiation.

The restructuring of both the Argentine and the Brazilian commercial bank debt is undoubtedly a formidable challenge owing to the difficulties associated with the arrears and the very size of the stock of the debt outstanding: $50 billion for Brazil and $27 billion for Argentina at the end of 1989. Even more significantly, however, both countries still suffer from severe macroeconomic imbalances (see chap. II). If control of the domestic economy is not first regained — and confidence rebuilt on the part of labour and investors who might act with a longer-term, growth-oriented perspective — it is hard to see how the long-term solution of the debt crisis could be arranged.

## Conclusions

Major concern about the international strategy for restructuring commercial bank debt was expressed in previous World Economic Surveys.[58] Results are turning out more or less as expected. The negotiation process continues to be long and arduous owing to the complexity of the packages and diverging interests among creditors, although increased flexibility was evidenced by the addition and modification of financial instruments used in the various agreements. Debt- service relief has not been large and the multilateral and other official funds available to support the enhancements have not been sufficient to encourage the banks to swap a large share of their bank debt into less risky bonds.

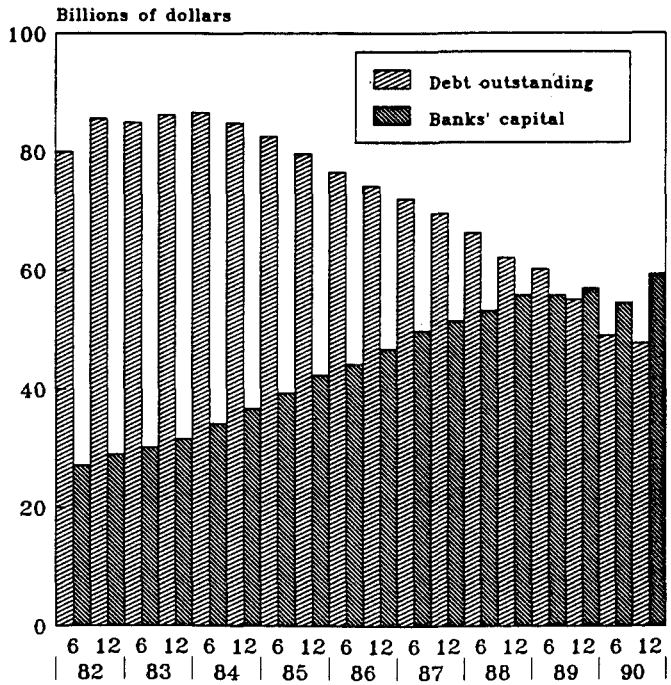
Except for those countries still to negotiate a "Brady" agreement, further debt reduction can be expected only through debt conversions. It seems indicative that debt-for-equity swaps regained momentum in 1990, with large portions of the debt being retired particularly in the financing of privatization programmes, where their potential inflationary consequences can be minimized.

Commercial banks increased their accounting provisions against developing country lending exposure after the suspension of interest payments by some debtor countries and have added substantially to their capital base. For example, the major money centre banks of the United States, whose exposure to developing country debt was almost three times their capital in 1982, have had capital in excess of total exposure since 1989 (see figure VII.2). With the high probability of losses already acknowledged in their reports to shareholders and bank regulators, some banks appear to have decided to wait for an improvement in the overall economic situation of these countries in the hope that they would eventually recover something from their loans. Rather than follow that strategy, other banks have decided to reduce their non-performing assets through swaps and avoid the long, repetitive negotiations involved in formal rescheduling.

Debtor countries, especially those with robust trade surpluses or a comfortable level of reserves, have thus been only intermittently pressured to reach an agreement with their commercial creditors. Contrary to expectations, non-performing debtors have not suffered cuts in their trade-credit lines but credit lines have not been expanded. In any event, it is not clear how long the present situation can be sustained. Multilateral official flows were temporarily suspended to certain non-performing countries and foreign direct investment has decreased in countries that suspended debt servicing. These countries are at a stalemate.

When their debt is finally restructured, it will likely involve— as in all the other commercial bank, Paris Club and multilateral institution arrangements — a substantial role for

Figure VII.2. Exposure of nine United States money centre banks to developing countries, 1982-1990




*Source:* UN/DIESA, based on data of United States Federal Financial Institutions Examination Council.

[57] Brazil proposed as well the complete securitization of the outstanding commercial debt. Banks would choose among three instruments: (a) zero-coupon bonds maturing in 45 years and carrying an interest rate of 9 per cent (bonds could be redeemed earlier, through quarterly auctions, or by lots if there are no bids, subject to the country's capacity to pay; the amount of bonds retired would be increased if GDP grew by 7 per cent per annum in two successive quarters and international reserves surpassed the equivalent of five months of imports); (b) 25-year reduced-interest bonds, with interest rates starting at 1.23 per cent during the first year and increasing to 7 per cent in the tenth year when it stabilizes; and (c) 15-year exit bonds, with an interest rate increasing from 1.23 per cent in the first year to 3 per cent in the fourth year. The servicing of these two bonds would reduce the amounts available for redemption of the zero-coupon bonds. Bonds would not be collateralized. Interest arrears would be included in the debt to be restructured but some payment was envisaged in 1991 and 1992 ("Comments on the Brazilian economy", *Banco BBA*, No. 20/90 (1 November 1990)).

[58] See *World Economic Survey, 1990...*, pp. 88-94 and *World Economic Survey, 1989...*, pp. 75-79.

new official finance in one form or another. The net result, if the "models" of 1989-1990 prevail, is unlikely to be a large reduction in the total debt obligations of the countries. To the degree, however, that commercial bank debt is replaced by bonds and multilateral obligations — credit instruments that are not easily renegotiated — the options for yet additional rounds of debt restructuring will be narrowed.

Thus, if international economic conditions allow and domestic political conditions are accommodating, highly indebted countries may carry their debt burden for another decade. They have already done so for almost 10 years, at the cost of economic stagnation or decline. What does not seem to be on the horizon is a generalized ability to grow out from under the remaining debt overhang. Indeed, as the international financial commitments and debt relief arranged for Eastern Europe — discussed in chapter IV — make clear, creditor Governments are aware that existing standards of debt relief have not been adequate in severely indebted countries that are making strenuous efforts to adjust their economies. The additional flexibility that may increasingly be shown in the Paris Club is a welcome sign for the future. Debt to commercial banks, however, will probably have to be handled more and more through the market, through swaps and other schemes whereby the creditors accept the need to release the debtor from obligations that in fact cannot be met.

# Chapter VIII

## SOME ECONOMIC ASPECTS OF MILITARY EXPENDITURE IN THE LIGHT OF THE END OF THE COLD WAR

There has been considerable debate over the years about the economic effects of defence spending and the burdens or benefits that military spending contributes to economic development.[1] That debate was animated by the arms race that extended throughout the world community. It has now been revived by the opposite prospect of a substantial slow-down or even a reversal of military expenditure, which raises issues that are not in all respects the mirror image of the earlier ones.

However, a starting point must be that the military is a large part of many economies: military spending is equivalent to about 5-6 per cent of the world's gross national product and is a particularly important aspect of government expenditure.

Table VIII.1 shows the percentage of central government expenditure accounted for by defence, social security and welfare, education, health, and economic affairs and services in different regions of the world for 1983 and the most recent year. The figures are difficult to compare across regions because in many large economies—for instance, Germany, India and the United States of America—states or local authorities account for much of general government revenue and take much of the responsibility for particular government functions, such as education or health. Defence is invariably undertaken wholly by the central government.

In developing countries, defence absorbs, on the whole, a larger share of central government revenue than in the developed market economies, excluding the United States-13 per cent as against 7.5 per cent. Only in the western hemisphere is this percentage less than 10 per cent. In Asia and the Middle East, the percentages are now broadly similar, at 17-20 per cent. In some Middle Eastern countries, nearly half of general government revenue was devoted to defence. Defence expenditure was in some regions greater than the Government's expenditure on health and education combined. This has raised the question whether Governments, especially in poorer countries, have misaligned their priorities[2] or whether there are good reasons for such a diversion of scarce resources to the military sector. It can be noted that the oil-exporting developing countries devoted less of central government expenditures to defence than did the non-oil-exporting countries, which could indicate that their defence effort is facilitated by their oil revenues to the extent that it does not impinge so directly on the government budget.

Numerous claims have been made for positive economic effects of military spending. Military service provides an opportunity for young men and women to acquire skills that would be useful in civilian economic activity. The results of the research and development undertaken for military purposes can be applied for civilian purposes to help boost the economy. Computers, originally developed for military applications, had been of inestimable value for the civilian economy.

Another reason for the new interest in investigating the effects of military spending was that, in the 1980s, as the extent of the debt crisis in the developing countries became evident and the question was raised how the money borrowed by many countries had in fact been spent. In many cases, heavily indebted

Table VIII.1. Components of central government spending, 1983 and latest available year

| | Defence | Social security and welfare | Education | Health | Economic affairs and services |
|---|---|---|---|---|---|
| World | | | | | |
| 1983 | 15.5 | 32.8 | 5.0 | 9.7 | 12.0 |
| 1987 | 16.0 | 29.5 | 4.8 | 11.0 | 10.7 |
| Developed market economies | | | | | |
| 1983 | 15.9 | 37.0 | 3.8 | 11.1 | 9.0 |
| 1987 | 16.7 | 33.3 | 3.5 | 12.6 | 8.8 |
| United States | | | | | |
| 1983 | 23.7 | 34.0 | 1.9 | 10.6 | 8.4 |
| 1989 | 24.6 | 26.6 | 1.8 | 12.9 | 8.0 |
| Other | | | | | |
| 1983[a] | 7.9 | 40.2 | 5.8 | 11.6 | 9.7 |
| 1987[a] | 7.5 | 38.5 | 5.4 | 13.0 | 9.5 |
| Developing countries | | | | | |
| 1983 | 13.9 | 13.1 | 9.7 | 3.9 | 24.2 |
| 1988 | 13.1 | 11.7 | 10.6 | 4.0 | 17.9 |
| Africa | | | | | |
| 1983 | 11.1 | 2.8 | 11.3 | 3.4 | 23.7 |
| 1985 | 10.3 | 2.5 | 12.4 | 3.9 | 28.2 |
| Asia | | | | | |
| 1983 | 20.7 | .. | 9.9 | 2.9 | 26.7 |
| 1989 | 16.9 | .. | 9.7 | 2.5 | 21.9 |
| Europe | | | | | |
| 1983 | 20.3 | 12.1 | 4.9 | 1.3 | 34.5 |
| 1989 | 22.1 | 12.3 | 6.6 | 2.6 | 27.5 |
| Middle East | | | | | |
| 1983 | 17.0 | 9.7 | 11.9 | 5.0 | 20.2 |
| 1988 | 18.3 | 12.0 | 16.1 | 5.8 | 13.3 |
| Latin American and the Caribbean | | | | | |
| 1983 | 5.5 | 23.2 | 9.2 | 4.9 | 21.7 |
| 1988 | 5.7 | 17.7 | 9.7 | 5.0 | 11.0 |

*Source*: IMF, *Government Finance Statistics Yearbook, 1990*.

[a]These figures were calculated using the weights given in IMF, *Government Finance Statistics Yearbook, 1990*, p.12, and can be considered only estimations.

[1] One of the early studies was *Economic and Social Consequences of Disarmament* (United Nations publication, Sales No.62.IX.1). Subsequent studies, entitled *Economic and Social Consequences of the Arms Race and Military Expenditures*, were issued in 1972, 1978, 1983 and 1989 (United Nations publications, Sales Nos.E.72.IX.16, E.78.IX.1, E.83.IX.2 and E.89.IX.2).

[2] See UNDP, *Human Development Report,1991* (New York and Oxford, Oxford University Press, 1991), p.83. The data on military expenditure in the *Report* itself and on military expenditure as percentages of GNP and arms imports and exports in its annex tables19 and 40 are often similar to those given by the United States Arms Control and Disarmament Agency in its annual publication *World Military Expenditures and Arms Transfers*. This publication has also been extensively used in the present chapter. The Agency stresses that "much of this data is not as accurate and reliable as uniform presentation in statistical tables may imply. This is particularly true of the data on military expenditures and arms transfers, which in many countries are subject to severe limitations of incompleteness, ambiguity and total secrecy" (United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers, 1989* (Washington,D.C., Government Printing Office, 1990), p.133).

countries had also expanded their imports of military equipment. A recent statement of the President of the World Bank suggests that one third of the debt of some major developing countries could be attributed to arms imports.[3]

Arms imports were not necessarily financed by arms-related loans. Rather than finance some productive investments from export earnings, a country could obtain a loan for those purposes and use export earnings for military expenditures. Whatever might be the long-term effects of purchasing security through military spending, it did not, in the short term, create those productive assets that would enable foreign loans to be repaid. Considerations as to the volume of defence spending undertaken by different countries are expected to enter increasingly into the calculations of aid-giving agencies and international financial institutions.[4]

The military build-up by the United States in the early 1980s was a response to the perceived high levels of military expenditure in the Union of Soviet Socialist Republics.[5] Analysts estimated Soviet defence spending and its burden on the Soviet economy from a variety of sources. There was considerable room for disagreement.[6] Given the important implications of the Soviet Union's defence spending, the matter of estimating and comparing levels of military spending acquired considerable practical importance.[7]

As a result of the policies of *glasnost* and *perestroyka*, the Soviet Union has begun to provide more reliable estimates of its military expenditure. Soviet economists have paid particular attention to the defence sector and how great a burden it has been for the Soviet economy and have at times even come out with higher estimates than have agencies of the countries members of the North Atlantic Treaty Organization(NATO). An assessment of the resources absorbed by the Soviet military sector will also provide information on the amount of resources that could be diverted to the civilian economy as military spending falls.

The matter of estimating Soviet military expenditure is particularly important because of the size of the Soviet armed forces, but very serious data problems exist for other significant military powers, such as China.[8] Moreover, data on the size and nature of international arms transfers are inadequate. If steps are to be taken to restrain international arms transfers, more transparency and openness will be required.[9]

Military expenditure has also led to concern that the leadership position of the United States was being undermined by the military build-up of the 1980s. Between 1980 and 1987, United States defence expenditure doubled, rising from $144.0 to $289.4 billion, which represented an increase in real terms of 45.7 per cent. As a percentage of gross domestic product, the increase was from 5.0 per cent to 6.4 per cent.[10] A study of the rise and fall of world powers, which attracted considerable interest, concluded that the fall of each of the world powers examined had been brought about by its overextension.[11]

The International Conference on the Relationship between Disarmament and Development, held in New York in 1987, crystallized international interest in many of the issues involved in economic aspects of security and military spending; in its Final Document, it called for greater international attention to all aspects of that complex relationship.[12]

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[3] Estimate of Mr.Barber Conable, president of the World Bank, reported in Stockholm International Peace Research Institute, *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), p.210.

[4] See UNDP, *Human Development Report, 1991* (New York and Oxford, Oxford University Press, 1991), p.83.

[5] In his State of the Union message in 1981, President Reagan of the United States claimed that in the 1970s the Soviet Union had spent $300 billion more on defence than had the United States.

[6] For an example of such disagreement, see James E. Steiner and Franklyn D. Holzman, "Correspondence: CIA estimates of Soviet military spending", *International Security*, vol.14, No.4 (Spring, 1990), pp.185-198.

[7] In the United States, there had been two previous episodes when a "gap" in favour of the Soviet Union had been used as a reason for advocating an arms build-up: in the mid-1950s when the United States Air Force claimed that there was a "bomber gap", and in the early 1960s when it claimed that there was a "missile gap". Subsequent research, including that undertaken by agencies of the United States Government, has revealed that such "gaps" did not exist. But it was, then, understandable that considerable research would be devoted to estimating Soviet military expenditure and capabilities, which the Soviet Union did not report on in an internationally comparable form. For a description of how the United States Government set about estimating Soviet military force levels and the problems involved, see Raymond L. Garthoff, "Estimating Soviet military force levels: some light from the past", *International Security*, vol.-14, No. 4 (Spring, 1990).

[8] See, in particular, *Reduction of Military Budgets: Construction of Military Price Indexes and Purchasing-power Parities for Comparison of Military Expenditures* (United Nations publication, Sales No.E.86.IX.2). The instrument for standardized international reporting of military expenditures is reproduced in the annex to the report of the Secretary-General entitled "Military expenditures in standardized form reported by States" (A/INF/45/5). The Department of Disarmament Affairs of the United Nations Secretariat has been engaged in extensive work to construct reliable data for military expenditure and the Department of International Economic and Social Affairs has developed an analytical framework linked to national accounts to measure the economic burden of military spending and to evaluate the economic consequences of reductions in military reductions. The latter Department has also started to compile data for countries, where such data are available, in order to quantify the above.

[9] See, in particular, "Study on the ways and means of promoting transparency in international transfers of conventional arms" (to be submitted to the General Assembly at its forty-sixth session as a report of the Secretary-General) and *Transparency in International Arms Transfers*, Disarmament Topical Papers No.3 (United Nations publication).

[10] *SIPRI Yearbook 1990* (New York and Oxford, Oxford University Press, 1990), pp.186, 191 and196. As a percentage of GDP, military expenditure peaked in 1986, at 6.7 per cent.

[11] Paul Kennedy, *The Rise and Fall of the Great Powers* (New York, Random House, 1987), p.xxiii.

[12] *International Conference on the Relationship between Disarmament and Development, New York, 24 August - 11 September 1987, Final Document* (United Nations publication, Sales No. E.87.IX.8).

## The economic rationale for defence spending

The interest in the economics of military spending has provoked the questions why particular countries have the defence establishments they have and why some countries spend the amounts they do on defence.

Military expenditure is a particularly important aspect of government expenditure, as seen in table VIII.1, and perhaps the one most directly controlled by the political decisions of the nation's leadership: responsibility for expenditures on education, health and infrastructure can be entrusted to local authorities or, in the case of health or education, to the individuals concerned. In the case of military expenditure, it is impossible for the central Government to assign its responsibilities to any other body.

Adam Smith noted 200 years ago, in *The Wealth of Nations*, that "the first duty of the sovereign, that of protecting society from the violence and invasion of other independent societies, can be performed only by means of a military force". That the first duty of a Government is to protect society from invasion can hardly be doubted. Every country does, in effect, develop a set of policies to meet the various threats it perceives. Military expenditure is one item in this policy mix. Adherence to an alliance is another policy option in the total package of measures a country can adopt to ensure its security. In some cases, the threats are set out by the Government, the policy options to ensure security examined and the decisions taken explained to the population; in other cases, no such analysis and explanation of the overall security picture is formally given.

Much has changed in the past two centuries. Today, security is increasingly seen as a task of establishing relations in which military conflicts will not or cannot arise. Moreover, invasion can now be seen not just as an attack on the country's geographical territory, but also as the unauthorized exploitation of the resources of the oceans over which it has the economic rights.

## Security and military spending in different countries

### The option of not having an army

One option that can be exercised as part of the security policy is simply to dispense with a military force. A country which has done so is Costa Rica. Costa Rica devoted its attention instead to overcoming the problems of disease and illiteracy and to fostering a national consensus behind peaceful economic development and the strengthening of the country's democratic institutions.

As shown in table VIII.1, Latin America and the Caribbean is the region with the lowest percentage of central government expenditure devoted to military expenditure. Several countries, especially the small island States, have extremely small military budgets and negligible armed forces.

One factor that might enable a country to opt for a small armed force is the knowledge that an attack upon it would be met by the superior armed forces of a friendly power. However, there is a full array of other reasons why some countries choose to have small military establishments. One of the reasons that Costa Rica took the decision to abandon its army was to avoid the possibility of domestic armed forces threatening the country's democratic way of life. This internal threat posed by the armed forces was felt to be as important as the potential threat of an external attack.

Reducing military expenditure and devoting resources to development has not simply a domestic dimension, but also international and strategic dimensions. The nature of a country's regime and the use to which that regime puts the country's resources is an important determinant of the overall security of the country, quite aside from the sums spent on the military and the size of the military establishment.

### Developed market economies

The majority of the world's armed forces are in developed market economies and in different alliances involving the United States: NATO, ANZUS (Australia, New Zealand and United States Treaty) and the bilateral treaty between Japan and the United States (the United States has treaty relationships with developing countries also-in Asia and Latin America). The perceived threat that the alliances and treaties among the developed market economies were originally designed to protect against came from the Soviet Union. As shown in table VIII.2, according to one set of data,[13] these countries accounted for about 15 per cent of the world's population but 67 per cent of global gross national product and 56 per cent of global defence spending.[14] Their armed forces number 21 per cent of the total in the world and they are armed with 21 per cent of the world's tanks and 30 per cent of the world's combat aircraft. Three countries-France, the United Kingdom of Great Britain and Northern Ireland and the United States-possess nuclear weapons. Expenditure on conventional weapons, however, consumes the major part of their total military expenditures.[15]

The armed forces that these countries muster are, then, primarily configured to fight a conventional war. In the case of the NATO countries, their main military planning was for fighting a war in Central Europe alongside their allies and against the conventional forces of the Warsaw Treaty Organization. The Federal Republic of Germany, which, apart from Turkey, had the largest number of soldiers in its army, was prevented by its Constitution from engaging in military operations outside NATO. On the other hand, of the other European countries, France and the United Kingdom have "out of area" commitments which might entail the independent use of their military

[13] It cannot be sufficiently emphasized that data on military expenditure are very imprecise and have only been given in this chapter as rough approximations and not for the sake of making implications about military capabilities.

[14] The country groupings are those given in International Institute for Strategic Studies, *The Military Balance, 1990-1991* (London, 1990). France is included in NATO.

[15] Of the four nuclear powers completing the instrument for standardized international reporting of military expenditures-France, the Soviet Union, the United Kingdom and the United States-only France was able to identify its "strategic forces" component; this came to 22 per cent of total spending in 1990 (see A/INF/45/5 and Add.1).

forces-as in the case of the United Kingdom when it sent a task force to the South Atlantic in 1982. The United States has commitments all over the globe and has forces specially trained for what it describes as "low intensity combat".[16]

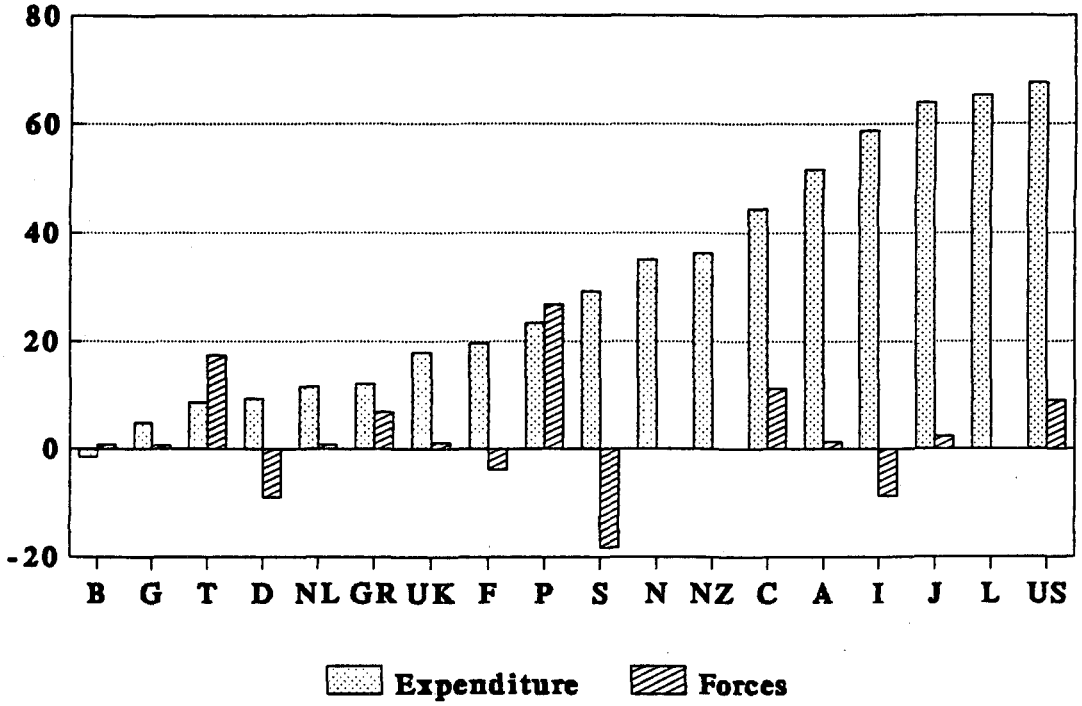
As shown by the relatively higher share of global defence spending than of armed forces accounted for by these countries, their armed forces are relatively capital intensive. They have been primarily configured to fight and prevail against other conventional forces by taking advantage of the most recent technology.

Countries in the different alliances have surrendered their complete autonomy in decisions on defence spending in order to obtain the benefits from being part of an alliance. This necessarily means that their defence spending decisions are not private domestic economic decisions, in the same way as, for instance, a neutral country's decisions are: for the issue of equity in burden sharing is inevitably present. The most common problem is that of the "free-rider", who can be defined as a member who makes the minimum contribution to the alliance in defence effort while enjoying the protection of the much larger efforts of the other members of the alliance.[17]

Figure VIII.1 shows the changes in military spending and in force levels among the developed market economies allied to the United States between the years 1978 and 1988.[18] The NATO target of 3 per cent annual increases in real expenditures, set in 1977, was only formally abandoned in 1990 and so was in effect. The NATO target was set in terms of expenditure which increased in almost all the countries over the time period shown. On the whole, the allied countries' armed forces rose at a smaller rate than did their defence expenditure. In the case of Italy and Spain, manpower levels fell as the armed forces were upgraded.

Figure VIII.1. Changes in real military expenditures and in levels of active armed forces among developed market economies, 1978-1988

(Percentage)




A = Australia
B = Belgium
C = Canada
D = Denmark
F = France
G = Germany
J = Japan
GR = Greece
I = Italy
L = Luxembourg
N = Norway
NZ = New Zealand
NL = Netherlands
P = Portugal
S = Spain
T = Turkey
UK = United Kingdom
US = United States

*Source*: United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers,1989* (Washington, D.C., Government Printing Office, 1990).

[16] This is thought to be primarily for conflicts in developing countries. For a critical discussion of "low intensity combat", see R. Luckham, "American militarism and the third world: the end of the Cold War?", Australian National University Research School of Peace Studies, *Working Paper* No. 94 (October 1990).

[17] Econometric evidence for "free-riding" would be a negative correlation between a country's military spending and the defence spending of the other members of the alliance or the leading power in the alliance.

[18] It should be stressed that these figures are from a United States Government agency and show increases only between two years and in terms of constant United States dollars. Different results might have obtained if domestic currencies had been used.

### Defence trends in neutral countries: the example of the developed market economies

The five European neutral developed market countries, Austria, Finland, Ireland, Sweden and Switzerland, spend a relatively small amount on defence, as measured by the ratio of their defence spending to GNP (see tables VIII.2 and VIII.3). Ireland is in a different geographical position from the other neutral countries in that it is not placed between the two alliances' forces. As a group, the neutral countries are relatively heavily armed: their main battle tanks and combat aircraft account for a much larger percentage of the world total than does their population. Although the size of their armed forces appears to be in line with their population, this is because only regular forces have been included. As a result of their geographical position and their own historical development, the continental neutral countries have actively pursued the policy of armed neutrality- relying on their own resources for their defence and being sufficiently heavily armed as to inflict unacceptable casualties on any aggressor. As these countries have fairly small populations, they have had to rely on the mobilization of reserves in the event of hostilities.

Table VIII.2. Military force estimates, 1989

(Percentages of world total)

| | GNP | Defence spending | Population | Armed forces | Main battle tanks | Combat aircraft |
|---|---|---|---|---|---|---|
| World | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| NATO | 51.8 | 51.8 | 12.5 | 19.5 | 20.0 | 28.3 |
| United States | 25.1 | 33.3 | 4.7 | 7.9 | 9.5 | 17.2 |
| NATO Europe | 24.1 | 17.3 | 7.3 | 11.3 | 10.3 | 10.7 |
| Australia, Japan and New Zealand | 15.4 | 3.9 | 2.7 | 1.2 | 0.8 | 1.5 |
| Subtotal | 67.3 | 55.7 | 15.2 | 20.8 | 20.7 | 29.8 |
| Neutral European developed market economies | 3.1 | 1.2 | 0.6 | 0.6 | 1.2 | 2.2 |
| South Africa | 0.4 | 0.4 | 0.7 | 0.3 | 0.2 | 0.9 |
| Total developed market economies | 70.8 | 57.3 | 16.5 | 21.6 | 22.0 | 32.9 |
| Warsaw Treaty Organization[a, b] | 12.4 | 28.6 | 7.7 | 18.7 | 46.4 | 19.9 |
| Economies in transition[a, b] | 1.7 | 2.2 | 2.2 | 3.8 | 10.0 | 4.6 |
| USSR[a, b, c] | 10.7 | 26.5 | 5.5 | 14.9 | 36.4 | 15.4 |
| Total non-developing countries | 83.2 | 85.9 | 24.2 | 40.3 | 68.5 | 52.8 |
| Developing Europe | 0.3 | 0.2 | 0.5 | 0.9 | 1.2 | 1.5 |
| North Africa | 0.6 | 0.5 | 1.8 | 2.2 | 2.2 | 2.8 |
| Middle East | 4.0 | 6.4 | 3.5 | 10.6 | 12.4 | 8.7 |
| Sub-Saharan Africa | 0.6 | 0.4 | 8.8 | 4.3 | 1.4 | 2.2 |
| Asia | 4.9 | 4.8 | 31.6 | 24.7 | 8.3 | 11.6 |
| Latin America and the Caribbean | 4.3 | 1.2 | 8.4 | 5.6 | 1.3 | 4.3 |
| Developing countries (excluding China) | 16.9 | 13.4 | 54.6 | 48.4 | 26.8 | 31.2 |
| China[a] | 2.0 | 0.7 | 21.2 | 11.3 | 4.8 | 16.0 |

*Source*:UN/DIESA, based on International Institute for Strategic Studies, *The Military Balance, 1990-1991* (London, 1990).

[a] There are no internationally agreed data for military expenditure. GNP estimates for the USSR and the former members of the Warsaw Treaty Organization are very tentative. Hence the figures given for these countries are highly unreliable and are meant to provide only rough estimations of the orders of magnitude. Only one source was used, as a combination of sources would have introduced further distortions.

[b] In March 1991, the Warsaw Treaty Organization ceased to exist as a military alliance.

[c] For the USSR, the International Institute for Strategic Studies figure for GNP was used ($2,215 billion (the average of the range of $1,950 billion to $2,480 billion given for GNP)) and the official figure for defence spending was doubled to make it comparable with NATO definition standards, as suggested by the Institute; this brought it to $239 billion. For the sake of comparison, the United States Arms Control and Disarmament Agency gives figures for Soviet GNP, in 1988, of $2,526 billion and for military expenditure, of $299.8 billion (SIPRI gives no figures for Soviet defence expenditure in its international tables).

Table VIII.3. The relative military burdens, 1989

(World average = 100)

| | | Defence spending to GNP ratio | | Armed forces to population ratio | | Armed forces to 18-32 year old men ratio |
|---|---|---|---|---|---|---|
| World | 4.4 | (100.0) | 0.5 | (100.0) | 3.9 | (100.0) |
| NATO | 4.4 | (99.9) | 0.8 | (156.1) | 6.6 | (170.0) |
| United States | 5.8 | (132.7) | 0.8 | (166.4) | 7.0 | (181.6) |
| NATO Europe | 3.1 | (71.8) | 0.8 | (155.7) | 6.6 | (169.9) |
| Australia, Japan and New Zealand | 1.1 | (25.2) | 0.2 | (44.7) | 2.1 | (53.9) |
| Subtotal | 3.6 | (82.7) | 0.7 | (136.1) | 5.8 | (150.8) |
| Neutral European developed market economies | 1.7 | (39.9) | 0.5 | (97.1) | 4.4 | (114.4) |
| South Africa | 4.2 | (96.2) | 0.2 | (41.4) | 1.7 | (44.0) |
| Total developed market economies | 3.5 | (81.0) | 0.7 | (130.8) | 5.6 | (144.8) |
| Warsaw Treaty Organization[a, b] | 10.0 | (230.4) | 1.3 | (244.1) | 10.8 | (278.2) |
| Economies in transition[a, b] | 5.4 | (124.1) | 0.9 | (177.8) | 8.2 | (212.8) |
| USSR[a, b, c] | 10.8 | (247.7) | 1.4 | (270.2) | 11.7 | (302.3) |
| Total non-developing countries | 4.6 | (105.8) | 0.9 | (172.2) | 7.5 | (192.6) |
| Developing Europe | 2.3 | (52.2) | 0.9 | (167.3) | 7.1 | (184.8) |
| North Africa | 3.9 | (89.0) | 0.6 | (120.5) | 4.8 | (124.3) |
| Middle East | 7.0 | (159.7) | 1.6 | (306.8) | 12.4 | (319.1) |
| Sub-Saharan Africa | 2.9 | (66.0) | 0.2 | (49.1) | 2.2 | (55.9) |
| Asia | 4.2 | (96.0) | 0.4 | (78.4) | 3.0 | (77.4) |
| Latin America and the Caribbean | 1.2 | (28.3) | 0.3 | (67.1) | 2.6 | (66.9) |
| Developing countries (excluding China) | 4.0 | (90.9) | 0.5 | (88.7) | 3.5 | (90.1) |
| China[a] | 1.4 | (31.8) | 0.3 | (53.1) | 1.8 | (45.8) |

*Source*: UN/DIESA, based on International Institute for Strategic Studies, *The Military Balance, 1990-1991* (London, 1990).

*Note*: Figures in parentheses are the region or country's ratio compared with the world average.

[a] There are no internationally agreed data for military expenditure. GNP estimates for the USSR and the former members of the Warsaw Treaty Organization are very tentative. Hence, the figures given for these countries are highly unreliable and are meant to provide only rough estimations of the orders of magnitude. Only one source was used, as a combination of sources would have introduced further distortions.

[b] In March 1991, the Warsaw Treaty Organization ceased to exist as a military alliance.

[c] For the USSR, the International Institute for Strategic Studies figure for GNP was used ($2,215 billion (the average of the range of $1,950 billion to $2,480 billion give for GNP)) and the official figure for defence spending was doubled to make it comparable with NATO definition standards as suggested by the Institute. This brought it to $239 billion. For the sake of comparison, the United States Arms Control and Disarmament Agency gives figures for Soviet GNP, in 1988, of $2,526 billion and for military expenditure, of $299.8 billion (SIPRI gives no figures for Soviet defence expenditure in its international tables).

## Military expenditure in Central and Eastern European countries

One of the consequences of the end of the cold war was the dissolution, in March 1991, of the Warsaw Treaty Organization as a military alliance. The Treaty was between the Soviet Union and six European countries. Estimates for all these countries are very tentative, especially as concerns economic data (GNP and military spending).[19]

After 1988, the decision of democratically elected Governments to leave the Warsaw Treaty Organization and to request foreign forces to withdraw from their territory showed that Governments' perceptions of the threat to their countries has clearly changed.

The burden that military expenditure placed upon members of the Warsaw Treaty Organization is shown in table VIII.3. Their ratios of armed forces to the total population and to the

[19] To illustrate the data problems, the figures from two publications- *SIPRI Yearbook, 1990*, (New York and Oxford, Oxford University Press, 1990) and the United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers, 1989* (Washington, D.C., Government Printing Office, 1990) — are given below for the military spending of the Warsaw Treaty Organization countries in 1988, in United States dollars; the ratio of the two figures (SIPRI=100) is also given; the ratio of defence spending to GNP is shown in parentheses.

| | SIPRI | ACDA | Ratio |
|---|---|---|---|
| Bulgaria | 1337 (4.4) | 6842 (12.7) | 512 |
| Czechoslovakia | 4241 (3.4) | 9818 (7.1) | 232 |
| German Democratic Republic | 7419 (5.0) | 14320 (7.7) | 193 |
| Hungary | 2343 (3.5) | 4489 (6.3) | 192 |
| Poland | 5657 (3.0) | 15660 (8.7) | 277 |
| Romania | 1402 (1.2) | 7670 (6.5) | 547 |

male population between the ages of 18 and 32 were about double the world average and, with the exception of the Middle East, the highest in any of the regions shown.

Military spending rose during the decade of the 1980s, which was a time that the regimes came under increasing, and ultimately irresistible, pressure. Significantly, Hungary had the lowest increase in military spending and saw a decline in the size of its armed forces. This has been attributed to the desire of the authorities to maintain the domestic consensus that enabled the regime to stay in power: a greater military burden would have made it more difficult to achieve a rise in living standards.[20] The military burden in the Warsaw Treaty States was seen by many analysts as a significant factor making for economic decay and a widening gulf between Governments and the people. Political opposition focused on conscription, nuclear arms and militarism.

Accordingly, the new Governments have announced measures to cut military expenditure,[21] reduce the length of conscription,[22] destroy military equipment,[23] reduce the size of the armed services[24] and abandon units that were closely associated with the previous regime.[25] It is difficult to calculate the economic effects of such measures precisely since these economies are changing very rapidly, but there is little question that when reliable figures are available, they will show considerably reduced defence burdens.

### Soviet Union

The demise of the Warsaw Treaty Organization was largely produced by a fundamental policy reassessment within the Soviet Union. The Soviet Union is the only country in the world that approaches any claim to strategic parity with the United States.[26] In the middle of the 1980s it found itself in an arms race with the United States.

In this arms race, the Soviet Union was at a disadvantage. With an economy much smaller than that of the United States, it would be expected to have to spend proportionately more on defence simply to keep up.

In a broader sense, the arms race was not between these two powers but between the Soviet Union and the other members of the Warsaw Treaty Organization and the developed market economies. Most of the developed market economies were allies of the United States and their military forces and expenditures should be included in any calculation of a strategic balance. In the second place, these countries had very strong trade links to each other and the rest of the world, whereas the Soviet Union was a comparatively minor player in the world economy.

This limited connection to the world economy was largely due to the centrally planned economic system. Moreover, in order to limit the Soviet Union's military potential, the United States and its allies had long made efforts to deny the Soviet Union and its allies technology that could have military applications. The Soviet Union was also denied the stimulus and cost-reducing possibilities from the free flow of products and technology within the market economies.[27]

No reliable estimates are available for the military burden in the Soviet Union, but table VIII.3, based upon one widely used source, shows that its ratios of military expenditure to gross national product and of the armed forces to the total population and to men between the ages of 18 and 32 were all more than double the world average, whereas, for the developed market economies as a whole, the ratio of defence spending to gross national product was about 80 per cent of the world average, and the ratios of the armed services to the total population and to men between the ages of 18 and 32 were between 30 and 45 per cent higher than the world average.

Another indicator of the military burden is the composition of the defence budget. As table VIII.4 shows, procurement absorbed nearly half the military budget of the USSR, a greater amount than in any of the other countries except Israel. Research and development also absorbed a larger percentage of the military budget- 18 per cent as against 12 per cent in the United States. The percentages of total military expenditures absorbed by personnel and operations and maintenance were lower than in any developed market economy and much lower than in the case of its then allies in the Warsaw Treaty Organization.[28]

After the change in the leadership of the country, the Soviet Union took decisions which, meeting a favourable and positive response from the NATO countries, led to the end of the cold war in Europe: it unilaterally reduced the size of its armed forces

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[20] Daniel L. Nelson, "The political economy of military effort in the Warsaw Treaty Organization", K. Hartley and T. Sandler, eds., *The Economics of Defence Spending: An International Survey* (London, Routledge, 1990), pp. 55-56.

[21] For instance, in May 1990, Bulgaria stated that it would cut military spending by 12 per cent. Czechoslovakia announced a reduction of 15 per cent in military spending in 1989-1990 and in 1989 Hungary claimed that it had reduced its expenditure by 17 per cent in real terms (see *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), pp. 178-179, and International Institute for Strategic Studies, *The Military Balance, 1990-1991* (London, 1990), pp. 44-46).

[22] Hungary announced that it would reduce its conscript service from 18 months to one year; Czechoslovakia has reduced its conscript service from 24 to 18 months International Institute for Strategic Studies, *The Military Balance, 1990-1991* (London,1990), pp.44-45.

[23] Poland has earmarked 800 tanks for destruction and destroyed 80 aircraft (International Institute, *The Military Balance*, ..., p.46).

[24] Bulgaria cut its armed services to 107,000 (from 129,000) and Hungary is to cut its army by 30-35 per cent International Institute, *The Military Balance*, ..., pp. 44-45.

[25] Czechoslovakia abandoned its 120,000 strong part-time People's Militia, and Poland reduced the size of its internal defence troops from 65,000 to 10,000 International Institute, *The Military Balance*, ..., p.46.

[26] China's active armed forces, 3million, were, in 1990, larger than those of the United States (2.1 million) but smaller than those of the Soviet Union (4 million. Figures from International Institute, *The Military Balance*. However, its military expenditure is considerably smaller, as shown in table VIII.2.

[27] One particular agreement over technology exchange was that between Japan and the United States in 1983, as a result of which a team from the United States defence industry came to Japan and conducted a survey of the possibilities of technological exchange. See S. Niioka, "Japan's defence spending", Hartley and Sandler, op.cit., p. 269.

[28] Questions have been raised about the comparability of these figures with those of other countries, especially since the Soviet Union relies heavily on conscripts, but the high percentages of Soviet expenditures on procurement and research and development give an indication of the effort required to provide Soviet forces with modern equipment, comparable to that deployed by the NATO forces (*SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), pp.163-165).

Table VIII.4. Percentage composition of defence budgets in different countries, 1989[a]

| | Personnel | Operations and maintenance | Procurement | Research and development |
|---|---|---|---|---|
| Australia[b] | 38.6 | 25.7 | 24.7 | 2.7 |
| Belgium[c] | 55.3 | 23.6 | 17.9 | .. |
| Canada | 46.0 | 28.9 | 22.2 | 1.4 |
| Denmark | 55.8 | 23.2 | 16.8 | .. |
| France[d] | 32.5 | 20.8 | 25.8 | 16.2 |
| Germany, Federal Republic of[b] | 42.8 | 26.3 | 21.0 | 5.0 |
| Greece | 47.6 | 19.8 | 28.2 | 0.1 |
| Italy | 47.0 | 25.4 | 22.4 | 2.6 |
| Luxembourg[b] | 72.0 | 19.3 | 3.1 | .. |
| Netherlands | 48.2 | 27.1 | 20.9 | 0.2 |
| New Zealand | 35.5 | 27.2 | 13.0 | .. |
| Norway | 35.6 | 24.2 | 27.8 | 2.1 |
| Portugal | 52.3 | 21.6 | 12.2 | 0.8 |
| Spain[b] | 47.9 | 25.7 | 21.4 | 1.8 |
| United Kingdom | 38.1 | 31.6 | 26.2 | 10.4 |
| United States | 35.1 | 21.6 | 29.5 | 11.6 |
| Austria[d] | 52.3 | 19.1 | 21.9 | .. |
| Finland | 38.6 | 29.6 | 28.5 | 0.3 |
| Sweden[b] | 34.3 | 24.9 | 24.9 | 12.6 |
| Bulgaria | 20.0 | 39.2 | 36.9 | 0.3 |
| German Democratic Republic | 26.7 | 40.0 | 28.8 | 0.3 |
| Hungary | 35.9 | 39.9 | 11.9 | 0.3 |
| Poland | 39.5 | 30.5 | 22.7 | 2.3 |
| USSR | 15.4 | 14.7 | 45.2 | 18.1 |
| Argentina | 51.8 | 25.7 | 19.8 | 1.0 |
| Barbados[d] | 60.9 | 32.4 | 0.4 | .. |
| Colombia[b] | 32.3 | 28.9 | 37.6 | .. |
| Israel | 24.7 | 5.0 | 68.1 | .. |
| Malaysia | 58.8 | 33.4 | 14.9 | 0.1 |
| Malta | 84.1 | 12.6 | 0.6 | 0.1 |

*Source*: A/INF/45/4 and Add.1 and A/44/422 and Add.1.

[a] Calendar or fiscal year.

[b] 1988.

[c] 1987.

[d] 1990.

and military expenditure, pursued vigorously arms reduction agreements, shifted towards a more transparently defensive concept in operational doctrine, withdrew its armed forces from Afghanistan and not only made no attempt to intervene to affect the course of events in its then Warsaw Treaty allies, but supported the course of reform.

## Developing countries

As shown in table VIII.2, the developing countries account for about 17 per cent of the world's gross national product but 75 per cent of its population. Their defence spending was about 14 per cent of the world's total. Their armed forces were relatively labour intensive: they contained 60 per cent of the world's armed forces, which were armed with about 30 per cent of the world's main battle tanks and 47 per cent of its combat aircraft. In only one region, the Middle East, was the defence burden, measured by the ratio of defence spending to GNP, substantially above the world average. The ratios of the armed forces to the total population and to men between the ages of 18 and 32 was three times the world average. For some countries, the figures are little short of extraordinary. In Iraq, the armed forces were equivalent to over 40 per cent of men between the ages of 18 and 32. Asia and North Africa were approaching the world average in terms of the ratio of defence spending to GNP, whereas sub-Saharan Africa and Latin America had considerably lower ratios. These regions also had relatively small armed forces in relation to the population.

On a global scale, there is almost no correlation between military expenditure and the size of armed forces and the level of violence. In 1989, only two "major armed conflicts" were identified as taking place in Europe.[29] The other 30 conflicts all took place in developing countries and were fought by troops of developing countries. Most of these conflicts were over the control of government, and were not inter-State conflicts in which the regular armies of two States engaged in conventional warfare.

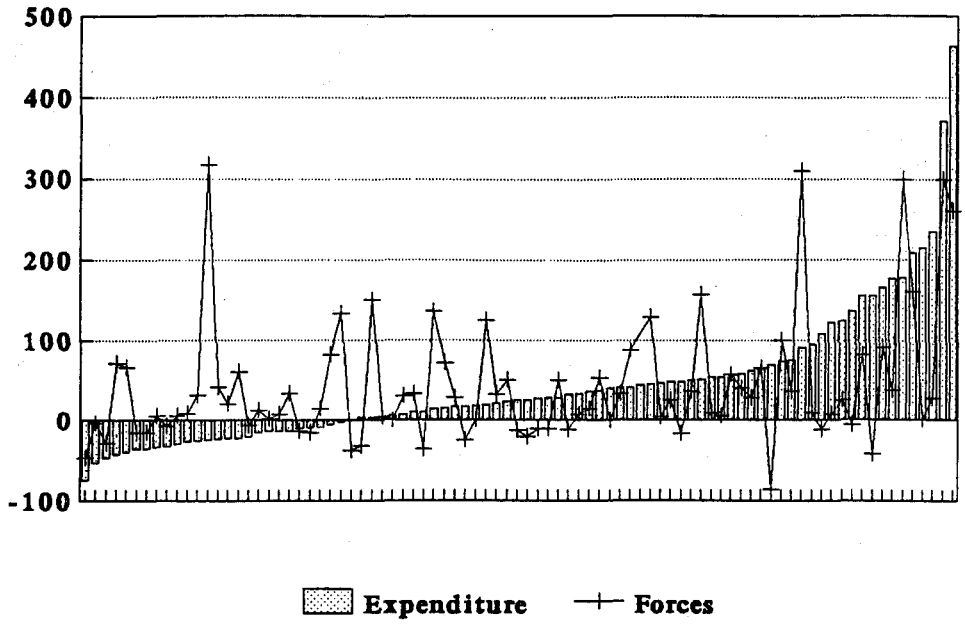
Whereas the developed market economies and the economies in transition have broadly similar political systems and common aspirations, developing countries have many different types of Governments. They are in very varied strategic positions, sometimes being, in effect, "free riders", enjoying the military protection of much larger neighbours, and sometimes engaged in confrontations with neighbours, which have often led to arms races within the region. The end of the cold war in Europe has, to some extent, introduced an extra element of uncertainty into the strategic considerations of developing countries in that they can no longer rely on the automatic protection of one of the two major military powers in a confrontation with what had previously been a close friend of the other.

As few developing countries belong to military alliances, it would not be expected that the changes in their military expenditure would be synchronized. Figure VIII.2, which is based upon a number of developing countries for which data were given by the United States Arms Control and Disarmament Agency, shows individual countries experiencing very marked changes in real expenditures between 1978 and 1988- from falls of about 80 per cent to increases of over 450 per cent. In several cases, expenditure on armed forces fell while the size of the armed forces rose and in general the tendency noted among the allies of the United States and the Warsaw Treaty Organization countries to experience greater rises in expenditure than in force levels was not so apparent.

[29] These were identified as occurring in Northern Ireland and in Romania. The latter conflict ended with the overthrow of the Ceausescu regime. SIPRI defines a major armed conflict as one in which at least 1,000 persons were killed (*SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), pp.-393-419).

Figure VIII.2. Changes in real military expenditures and in levels of active armed forces among 86 developing countries, 1978-1988

(Percentage)




*Source*: United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers, 1989* (Washington,D.C., Government Printing Office,1990).

The great fluctuations in expenditure confirm that military expenditure is a factor over which Governments do have control. At the same time, however, the level of military spending tends to be correlated with the level of gross national product, which has suggested that the more "economic space" that has to be defended, the greater the military expenditure. The "economic space" to be protected should be seen to include not only the country's geographical boundaries, but also the waters over which it has, or asserts, economic rights. Military forces could be required to prevent the unauthorized exploitation of these resources.

A different kind of threat to the "economic space" could come from attempts by the disadvantaged in society to obtain a greater share of national wealth. In these latter cases, however, the nature of the Government would itself be a factor determining military expenditure, repressive or military regimes spending more on the military than do democratic regimes. It has been noted in international comparisons that military-controlled Governments have larger armed forces per size of population and larger military expenditure percapita than other developing countries.[30]

## Defence expenditures and economic growth in developing countries

In recent years, the determinants of military spending have been extensively analysed along with the effects of military spending on, in particular, the growth of national output. Much attention has been paid to developing countries, although many of the same theoretical considerations apply to developed countries also. Two theoretical problems are of particular importance-the questions of causality and measurement.

As military expenditure is often a large part of an economy, it often rises with other variables-such as overall GNP or education or health expenditure- but to imply a causal relationship is highly problematic. Much of the discussion on military expenditure concerns the contribution that would have been made to welfare if resources that had been devoted to the military had instead been invested in the civilian sector. However, the national accounts statistics do not provide for any distinctions to be made in the contribution to welfare of different activities that consume the same resources. It could be expected that an airport built for strictly military purposes in a remote part of the country would have a different effect on long-term development and on the meeting of present needs from a civilian airport built to serve a major population centre. Yet if the costs of construction were the same, the contribution to GNP during the construction period would also be the same.

An early study on the relationship between the military ex-

[30] Ruth Leger Sivard, *World Military and Social Expenditures, 1987-88*, (Washington, D.C., World Priorities, 1987), pp.26-27.

[31] E. Benoit, *Defence and Economic Growth in Developing Countries* (Boston, D.C.Heath and Company, 1973).

penditure and economic growth in developing countries suggested that the two were positively linked.[31] Subsequent economic studies, using different data series and different and more complex equations, have, however, tended to establish that the relationship between military spending and economic growth is a negative one: that, in fact, the positive effects of military spending, such as introducing technology into society and educating part of the population, are outweighed by the negative effects of diverting scarce resources, including, in particular, foreign exchange and skilled labour, from potential civilian uses to military uses.[32] A recent study concluded that "there are two constraints on the growth process in [developing countries], one structural [the role of "modernization"] and the other resource based [lack of domestic savings]. The military may have stimulating effects on the former but certainly depresses the latter. The cross-sectional evidence suggests that the latter effect is dominant".[33]

Gross national product is but one proxy for "welfare". Social spending is another. Military spending is one item of government spending that, it is argued, could be given priority over spending on health and education, particularly in cases where central government expenditure is being cut. Moreover, inasmuch as military imports have resulted in a growth in the debt burden, they could result in the cutting back of essential imports needed for child health and infrastructure. A recent study found that in nine sub-Saharan countries military expenditure increased as a percentage of central government expenditure at a time when central government expenditure was being reduced in response to stabilization programmes sponsored by the International Monetary Fund (IMF).[34] Regression analysis has suggested that countries that had high military budgets tended to have high mortality rates for children under five, after the effects of GNP per capita had been accounted for, and that countries that increased their military spending rapidly also witnessed a reduction in the speed at which the under-five mortality rate was falling[35] (this variable was used as an indicator for trends in child welfare).

However, an apparently contradictory finding as to the choices made by Governments between education and military expenditure was that those developing countries that had greater military burdens also had a larger share of GNP for public expenditure on education.[36] This suggested that there were strong constituencies in developing countries for both military spending and public education.[37] Military spending could, then, be viewed in such countries as contributing to long-term national welfare by protecting the expanding "economic space", in the same way as higher education expenditure contributed to long-term development. What is being examined in this case is not so much the relationship between military spending and economic growth as how the trade-offs that the Government makes in allocating funds to different budget items affect social development.

The relations between the levels of development and military spending are clearly complex. More important, however, are the difficulties that arise in using results obtained from cross-sample studies as any guidelines for military expenditure in a particular country. The situation of different developing countries varies greatly not only strategically, but also as concerns their stage in the development process. However, individual country studies are confirming what would appear intuitively reasonable: that military spending is related to the level of the perceived threat. Pakistan's military expenditure is positively correlated to that of India,[38] and Israel's to that of its neighbours.[39] Military Governments do tend to spend more on the military, as exemplified by the former Governments in Argentina and Chile,[40] and military imports are often incurred when a country simply cannot afford them, as in the case of Peru in the late 1970s.[41] The resulting debt problems meant that military expenditure directly cut into public investment and social expenditures. Different case studies, together with cross-sectional analysis, are thus showing that an individual country's military sector is an important part of the economy and can be subject to informative economic analysis. In the case of developing countries, much of the analysis consists in estimating the real costs to the economy of the military sector. This in itself gives rise to questioning what kind of security is being purchased with this volume of resources and whether there are other ways of obtaining security at a lower cost.

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[32] As described above, there is a certain amount of homogeneity in the social and economic roles of the military in developed market economies, which facilitates cross-country examinations of the effects of military spending on growth. In these countries, it appears that the main effect is on investment: military spending crowds out investment and thereby reduces growth (RonaldP.Smith, "Military expenditure and investment in OECD countries, 1954-1973", *Journal of Comparative Economics* (1980)). In the developing countries, there is not this degree of homogeneity; moreover, several of them have been engaged in hostilities. This makes it especially important to specify the model to be tested and the likely direction of causality. One particular problem is that not only are data series restricted, but also, there are very serious doubts whether the military expenditure of developing countries is, in fact, being adequately measured. In low-income countries, non-tradable goods and services (of which military expenditure, with the exception of arms imports, is largely composed) tend to be priced at a relatively low rate compared to tradables. When, therefore, military spending is revalued by purchasing power parities to give comparable estimates of the military budget across countries, the ratio of military expenditure to gross national product would tend to rise (for a description of the work of the United Nations in this field of comparing defence burdens, see *Reduction of Military Budgets: Construction of Military Price Indexes and Purchasing Power Parities for Comparison of Military Expenditures* (United Nations publication, Sales No.E.86.IX.2)).

[33] S. Deger, "Economic development and defense expenditure", *Economic Development and Cultural Change*, vol.35, No.1 (1986).

[34] S. Deger and S. Sen, *Arms and the Child* (UNICEF-SIPRI, 1990), pp.40-41.

[35] Ibid., pp.51-54.

[36] In this connection, table VIII.1 shows that the share of central government expenditure going to both defence and education was higher in the Middle East than in Latin America.

[37] Peter Hess and Brendar Mullar, "The military burden and public education expenditures in contemporary developing nations: is there a trade-off", *Journal of Developing Areas*, vol.22, No.4 (July 1988), p.509.

[38] S. Deger and S.Sen, "Military security and the economy: defence expenditure in India and Pakistan", Hartley and Sandler, op.cit., p.211.

[39] Alex Mintz, Michael D. ward and Shimshon Bichler, "Defence spending in Israel", Hartley and Sandler, op.cit., pp.179 and 183.

[40] Romas Scheetz, "Military expenditures in Argentina, Chile and Peru", Hartley and Sandler, op.cit., pp.230 and 233.

[41] Ibid., p.237.

## The outlook for military spending

### Recent trends

The concern about the military spending of developing countries was raised by its very rapid growth.[42] After the mid-1980s, however, military expenditures in real terms in both the developing and the developed countries stabilized and then declined, as shown in table VIII.5, which gives data from one widely used source. The table illustrates trends in real expenditure and does not readily permit comparison between the real military expenditure in different countries or regions.

Table VIII.5. Military expenditure, 1978-1988

(Constant 1988 dollars)

| | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 854.3 | 860.7 | 899.4 | 928.0 | 974.9 | 1000.9 | 1024.4 | 1053.1 | 1054.9 | 1068.2 | 1032.4 |
| Developed market economies | 356.5 | 366.7 | 389.2 | 407.4 | 432.2 | 454.6 | 470.9 | 499.0 | 508.5 | 521.3 | 523.8 |
| NATO | 317.1 | 325.2 | 345.4 | 363.0 | 386.5 | 405.8 | 421.1 | 447.3 | 456.1 | 466.4 | 467.3 |
| United States | 183.5 | 188.7 | 203.7 | 219.3 | 238.2 | 253.6 | 266.8 | 290.5 | 299.3 | 306.0 | 307.7 |
| Other NATO | 133.6 | 136.5 | 141.7 | 143.7 | 148.3 | 152.2 | 154.3 | 156.8 | 156.8 | 160.4 | 159.6 |
| Other Europe | 18.9 | 19.8 | 20.7 | 20.7 | 21.2 | 21.7 | 21.6 | 22.2 | 22.1 | 22.9 | 21.9 |
| Japan | 17.6 | 18.8 | 19.3 | 20.2 | 21.3 | 22.5 | 23.7 | 25.0 | 26.1 | 27.6 | 28.9 |
| Oceania | 4.8 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6 | 6.9 | 6.9 | 7.1 |
| Warsaw Treaty Organization | 316.8 | 321.6 | 330.1 | 333.4 | 342.9 | 347.9 | 352.8 | 360.4 | 365.2 | 372.2 | 358.6 |
| USSR | 268.0 | 273.1 | 280.4 | 283.4 | 288.5 | 292.7 | 296.8 | 303.0 | 306.4 | 313.0 | 299.8 |
| Other | 48.8 | 48.5 | 49.7 | 50.0 | 54.4 | 55.2 | 56.0 | 57.4 | 58.8 | 59.2 | 58.8 |
| Developing countries | 181.0 | 172.4 | 180.1 | 187.2 | 199.9 | 198.4 | 200.7 | 193.7 | 181.2 | 174.7 | 150.0 |
| Africa | 12.1 | 13.2 | 12.6 | 13.1 | 12.9 | 12.9 | 13.8 | 12.3 | 12.3 | 10.8 | 10.7 |
| Latin America | 12.2 | 12.1 | 13.0 | 13.0 | 16.6 | 14.7 | 14.6 | 14.2 | 14.1 | 14.1 | 12.0 |
| Middle East | 97.1 | 86.4 | 95.2 | 100.7 | 107.5 | 107.3 | 109.1 | 101.6 | 87.1 | 82.3 | 60.7 |
| East Asia | 23.3 | 23.0 | 23.8 | 24.8 | 26.2 | 26.6 | 26.2 | 27.9 | 29.0 | 27.7 | 27.5 |
| South Asia | 7.6 | 7.3 | 7.3 | 7.9 | 8.7 | 9.9 | 10.4 | 10.9 | 11.6 | 12.7 | 12.8 |
| China | 23.6 | 25.5 | 23.2 | 22.7 | 22.7 | 22.2 | 21.7 | 21.7 | 21.3 | 21.2 | 21.3 |

*Source*: United States Arms Control and Disarmament Agency, *World Military Expenditure and Arms Transfers, 1989* (Washington, D.C., Government Printing Office, 1990).

The most important fact, however, is that there has been a reversal in the recent trend in global military expenditure. World expenditure fell, for the first time in the 1980s, in 1988. Expenditure in both the then Warsaw Treaty Organization countries and the developing countries fell. The expenditure of the developed market economies rose slightly in 1988 after accelerating rapidly in the early 1980s. Expenditure in the United States increased marginally, while that of its NATO allies fell. Japanese expenditure continued to rise, as it had over the decade.

Data from another source, SIPRI, bring out the same broad trends as do those of the United States Arms Control and Disarmament Agency: that military expenditure in real terms fell in the late 1980s. They showed the fall continuing into 1989. Its assessment was that "the rapid increases of the early 1980s have disappeared, but deep cuts in defence spending are still not visible, nor are the rewards, if any, of the current disarmament process. Military expenditure is now in a stable and gentle decline, probably in anticipation of successful and verifiable arms control negotiations".[43] SIPRI estimated that global expenditure fell a further 5 per cent in 1990, the United States' expenditure falling by 6 per cent and the Soviet Union's by 10 per cent.[44]

Of the different regions, the Middle East saw a very steep drop in expenditure from its peak in 1984. The decline can be largely attributed to diminished expenditures incurred by the Islamic Republic of Iran and Iraq. Expenditure of the two combatants reached a peak in 1984, when a total of nearly $48 billion ($55 billion at 1988 prices and exchange rates) was expended.[45] In 1988, it was estimated by SIPRI that the two combatants' spending had halved in real terms.

[42] For instance, Deger and Smith have described how "total [developing country] defence expenditures increased from $4.065 billion per year (at1970 prices and 1970 exchange rates) in 1955 to $26.299 billion per annum in 1975- a six-fold increase in real terms within 20 years. In 1955, all less developed countries taken together were spending 3 per cent of total world military expenditure; in 1975 this ratio had increased to 12 per cent. Between 1955 and 1975, military spending in [developing countries] increased at an average annual rate of 10 per cent compared with a world increase of 2.7 per cent and a NATO increase of 1 per cent" (S.Deger and R.P.Smith, "Military expenditure and growth in less developed countries", *Journal of Conflict Resolution*, vol.27, No.2 (June,1983), p. 336).

[43] S. Deger, "World military expenditure", *SIPRI Yearbook,1990* (New York and Oxford, Oxford University Press, 1990), pp.143. The United States Arms Control and Disarmament Agency did not give figures for the Islamic Republic of Iran and Iraq after 1985.

[44] As reported in *Financial Times*, 24 May 1991.

[45] United States Arms Control and Disarmament Agency, *World Military Expenditure and Arms Transfers, 1989* (Washington, D. C., Government Printing Office, 1990).

Table VIII.6. Trends in imports of major weapons, 1970-1989

(Millions of dollars, 1985 constant prices)

| Region[a] | 1970 | 1980 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|
| South Asia | 857 | 2424 | 2727 | 4965 | 5867 | 4847 | 6906 |
| Far East | 2299 | 3085 | 3156 | 3266 | 3073 | 4118 | 3279 |
| Middle East | 5242 | 8377 | 9691 | 10371 | 12812 | 7463 | 3270 |
| North Africa | 185 | 3334 | 1113 | 1393 | 538 | 381 | 1185 |
| Sub-Saharan Africa | 389 | 1535 | 2007 | 1667 | 1834 | 1392 | 397 |
| South Africa | 275 | 109 | 4 | 154 | 20 | 28 | 3 |
| South America | 285 | 2137 | 1219 | 1124 | 1655 | 824 | 963 |
| Central America | 185 | 187 | 659 | 618 | 371 | 203 | 300 |
| Total | 9717 | 21189 | 20576 | 23560 | 26170 | 19 256 | 16301 |

*Source*: *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), pp.250-251.

[a]Regions are as given by SIPRI.

In the Middle East, spending was estimated to have declined by 10.4 per cent per annum between 1983 and 1988. African and Latin American countries also experienced declines in real expenditure of just over 3 per cent per annum. In Latin America, military expenditure had reached a peak in 1982, the year that the debt problem reached crisis proportions. Individual countries in the two regions-in particular, Nigeria in Africa and Argentina and Venezuela in Latin America-saw rapid falls in military expenditure.

In other regions, however, military expenditure continued to grow in real terms in the latter part of the decade: in India and Pakistan, which are major military powers, military expenditure continued to expand, and some of the fast growing economies in the Far East-the Republic of Korea, Singapore and Taiwan Province of China-were able to increase defence spending without raising the share of military spending in output. SIPRI reported that military expenditure in developing countries as a whole stabilized in 1990, after falling since 1984.

That economic difficulties, particularly debt problems, were a large part of the explanation for the decline in military expenditure in the developing countries is further suggested by the decline in arms imports after 1986 in sub-Saharan Africa and South and Central America, which were severely affected by the debt crisis. Figures for arms imports in constant terms are given in table VIII.6. Arms imports into South Asia expanded rapidly during the decade and showed no sign of reaching a peak. In the Middle East, however, 1987 represented a peak year, after which imports declined sharply, and, in 1989, were surpassed by both South Asia and the Far East. The Middle East, which accounted for nearly 50 per cent of the developing countries' arms imports in 1987, accounted for only 20 per cent in 1989.[46]

### The "military balance" after the cold war

In October 1990, the formal reunification of Germany took place. The cold war in Europe was, in effect, over. The troops of the world's largest military powers, the Soviet Union and the United States, had, together with their respective allies, confronted each other directly along the border of the Federal Republic of Germany and in Berlin. The greatest concentration of aircraft and tanks in the world was that deployed by the two major alliances in Europe: between the Atlantic and the Urals, the two alliances deployed a total of about 75,000 main battle tanks and 11,000 combat aircraft,[47] about 45 and 30 per cent, respectively, of the world's total. The major threat to the very survival of life on the planet was that posed by the possibility of an armed clash between these alliances leading to the employment of their complete arsenal of weapons, including nuclear weapons. The danger of an armed clash was heightened by the proximity of the forces of the two alliances, which made it very difficult for either side to feel assured that it would not suffer a surprise attack and therefore feel obliged to undertake a preemptive strike. With the reunification of Germany and the ongoing withdrawal of Soviet forces from the territories of the former German Democratic Republic and the other countries of the Warsaw Treaty, the chance of a surprise attack has been virtually eliminated. With modern methods of detection and when verification mechanisms are put in place, it will be impossible in the future for either the Soviet Union or the United States to amass sufficient forces in Europe to launch a surprise attack: the preceding military build-up will simply be too obvious.

Furthermore, the new Governments of the former non-Soviet members of the Warsaw Treaty Organization of Eastern Europe did not see the forces of the North Atlantic Treaty Organization as posing any military threat to them: these countries were, in fact, seen as friends rather than potential adversaries. Militarily, the Warsaw Treaty Organization had ceased to have any meaning and was dissolved in March 1991.

There is no longer a "military balance" between forces on either side of a European divide. If a "military balance" were now to be drawn up, it would have to treat the former members

[46] Although there are differences between the SIPRI data and those of theUnited States Arms Control and Disarmament Agency, both show arms imports to developing countries reaching a peak, in real terms, in the mid-1980s- according to SIPRI in 1987 and according to United States Arms Control and Disarmament Agency in 1984. Both show similar patterns among the regions: in particular, imports into Latin America and Africa, declined.

[47] Figures from tables 4A and 4B in International Institute for Strategic Studies, *The Military Balance, 1990-1991* (London, 1990), pp.232-233. The military balance analysed in that publication is primarily that between NATO and the Warsaw Treaty Organization, with especial emphasis on the disposition of forces in Central Europe.

of the Warsaw Treaty Organization on the same level as the neutral developed European countries, which are considered friendly to the NATO alliance and among which a war is virtually unthinkable. In effect, then, when Australia, Japan and New Zealand, which all have treaty relationships with the United States, are included, all the present developed market economies and the former Eastern European centrally planned economies are friendly, if not allied, countries in that they would not be expected to confront each other militarily.[48]

### Effects of the Gulf war on military expenditure in developed market economies

The end of the cold war occurred at the same time as the Gulf crisis, the reunification of Germany taking place in October 1990, three months after the Iraqi seizure of Kuwait in August 1990.

The Gulf war was the first full-scale war of the post-cold war period and involved a major military power. The one constraint in the conduct of operations was to minimize civilian casualties in Iraq and Kuwait, but, other than that, the coalition forces were determined to destroy the armed forces of Iraq and the infrastructure that supported them, including, in particular, weapons production plants. To do so, they felt free to use all the available conventional weapons in their arsenals, many of which had never before been tested in battle.

The coalition's victory demonstrated that the high- technology weapons that the developed market economies had developed did achieve their objective in enabling opposing forces to be defeated at a cost acceptable to them in terms of lives and expenditure.[49] If the result of operations had been different, if the coalition forces had suffered heavy casualties or if the new weapons had proved highly inaccurate in locating and destroying targets, there might have been a profound reappraisal, particularly within the United States, of decisions to reduce military spending. As it was, the performance of the military equipment possessed by the opposing forces did not lead to an assessment that those supplied by other countries were superior to those available to the coalition members, in particular the United States, and that there was, therefore, a need to catch up in a technological arms race.

### Military establishments now of concern to the international community

The Gulf war will have an effect on military expenditure, however, not so much by changing the spending patterns within the developed countries, as by promoting a further re-examination of global security issues. Military spending and force levels are matters of concern to the international community and, even before the war, were no longer considered purely domestic matters. After the Gulf war, the argument that donors and multilateral agencies should take into account a country's military expenditure has been buttressed by considerations about the effect of military establishments on regional and global security. The difference between an offensive as distinct from a defensive military posture can be expected to receive more attention.

The Security Council has mandated the destruction of Iraq's chemical, biological and ballistic missile capabilities. It has also taken steps to prevent Iraq from acquiring nuclear weapons. It further decided to prevent the acquisition by Iraq of conventional weapons or of the means of producing them for a minimum period of 120 days.[50] The implication is that force levels and the concomitant analysis of threats that countries face are now part of legitimate international concern and will enter international discussions. It took a war that destroyed much of one country's military capability to bring this matter to the forefront of international concern.

### Enhancing collective security

The financing of the coalition forces' military effort[51] was undertaken by the members of the coalition, including, in particular, Kuwait, Saudi Arabia and the United Arab Emirates, who paid not only the cost of their own military operations, but also contributed towards the costs incurred by their partners. Moreover, other countries, which were not involved in military activities, in particular Germany and Japan, also agreed to support the costs of the war, in some cases by making direct payments to the participants.

The Gulf war demonstrated that existing military forces are sufficient to enforce collective security and that military and financial contributions to global security should be divided on an equitable basis. Yet, although the Gulf war was undertaken to enforce Security Council resolutions, it was still a voluntary operation in the sense that the members of the coalition were not requested by the Security Council, under Article 43 of the Charter of the United Nations, to provide forces. The Gulf operation did not, then, set a new precedent in making the enforcement of collective security decisions automatic. However, reductions in military spending would be facilitated by a growing assurance that collective security does work, and that it will be automatically triggered, resulting, if necessary, in the application of force to defeat any aggression, even against a poor and strategically insignificant country. The end of the cold war has made it easier for the Security Council to take decisions concerning collective security. If collective security, as envisioned in the Charter, is made fully effective, this could be expected to lead to further major reductions in military expenditure.

### Conversion and future trends in military spending

From the preceding discussion, it can be seen that the end of

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[48] It has indeed been the experience that liberal democracies do not go to war with each other (see J.L.Gaddis, "Toward the post-Cold War world", *Foreign Affairs* (Spring,1991), p.105).

[49] It is very difficult to arrive at a cost of the Gulf war to the coalition partners, as some of the expenditures would have been incurred even if there had been no hostilities. Particularly in the case of the developed market economies, some of the ammunition expended would have been designated for destruction in the event of successful arms reduction negotiation talks. Even without formal arms control agreements, but with a continuation of the relaxation of tensions, some stock levels might have been thought more than adequate. The very intensity of operations resulted in a short war. For the United States, rough estimates suggest that its part in the air campaign cost about $500,000 a day and in the ground campaign about $1 billion a day (*The New York Times*, 25January1991).

[50] Security Council resolution 687(1991).

[51] Other arrangements were also made to contribute to the economic stabilization of countries affected by economic sanctions, such as Egypt, Jordan and Turkey.

the cold war did mark a turning point for military expenditure and that decisions on military expenditure were crucial to the relaxation of tensions. The Soviet Union, after examining its economic and strategic position, made an assessment that its interests would be better served by a different military posture. It took unilateral steps-in particular by announcing, in December 1988, the reduction in the Soviet armed force by 500,000 by the end of 1991 and the restructuring of the remaining units in Eastern Europe to make them strictly defensive. Reported military expenditure was reduced from 77.3 billion roubles in 1989 to 71 billion roubles in 1990.

The implementation of arms reduction agreements will involve short-run costs in verification and destruction of weapons. Moreover, rehousing the troops who are returning from Eastern Europe will be another one-time cost. In the short run, too, there will be significant costs involved in converting establishments from military to civilian production.

An assessment of the economic impact of the reduction of military expenditure and the conversion of facilities[52] is hampered by transition in the Soviet Union from a centrally planned economy to one in which the prices of outputs bear a relationship to their costs of production: at the present time, the extent of the military sector's involvement in the economy is still inadequately documented.

Moreover, the defence industries of the Soviet Union were particularly immune from cost-benefit considerations, a feature that is not uncharacteristic of other industrial countries. They had a first claim on resources, including skilled labour and physical equipment, with which to produce military equipment and had little incentive to economize on inputs when producing military items of the required specifications. Conversion to civilian production is going ahead. In 1990, the share of consumer goods in the total output of defence industrial units was 40 per cent, which was set to rise to 50 per cent in 1991 and 60 per cent in 1995.[53] There are many examples of specific plants or parts of plants being converted to civilian production - for instance, children's tricycles are being produced at the Khrinichev plant near Moscow.[54] The Soviet Union, however, recognizes that conversion is not simply a technical question, to be solved at the level of the plant, but one involving the whole structure of the economy and economic relations with other countries. There have been criticisms of the way conversion has been handled. It has been argued that the full success of conversion efforts would itself require the creation of an entrepreneurial mechanism and the democratization of economic relations and, therefore, that the production facilities and the conversion process should cease to be directed by the defence departments.[55] There are also questions about the state of the capital stock of defence plants and whether foreign partners could become involved in the new non-military production lines.

The debate on conversion is thus over the best means of implementation and not over the merits of conversion since the political decision to cut military expenditures has already been taken. In the long term, with a smaller military establishment, the Soviet economy should be able to satisfy further consumer demands, provide higher living standards for the population and play a more prominent role in the international community.

Other countries have also reassessed their military postures and announced substantial force reductions. In June 1990, the United States Defense Secretary proposed force levels for fiscal year 1995 that were about 25 per cent lower than in fiscal year 1990: the Army was to be cut from 744,000 to 520,000 (by 30 per cent), the Navy from 591,000 to 501,000 (by 15 per cent), the Marines from 197,000 to 148,000 (by 25 per cent) and the Air Force from 545,000 to 466,000 (by 15 per cent).[56] However, because the emphasis was to be on cutting the ground forces in Europeby improving the weaponry and increasing the flexibility and "out of area" capability of the remaining forces, sizeable increases were still expected for anti-missile defences, the procurement of new strategic nuclear weapons systems, the purchase of new conventional weapons[57] and sizeable spending on the research and development of new weapons. In total, the defence budget would be cut by only 10 per cent.[58]

As with the Soviet Union, cuts in military expenditure in the United States will take place over time and costs will be incurred. Weapons have to be destroyed, verification measures taken and adjustments made at home as troops are demobilized and bases closed. In any event, there is little possibility that within the next few years military spending will be reduced in real terms to its level before the build-up in the early 1980s. However, with progress in arms reduction and with the Soviet threat being perceived as diminishing, reductions in military expenditure could acquire their own dynamic. One suggestion made was that the most dramatic declines would take place towards the end of the decade and in real terms military expenditure, which was about $300 billion in 1990, would fall from a level of about $250 billion a year in 1997 or 1998 toward $160 billion a year in the year 2000.[59]

A substantial reduction in military expenditures would make it much easier to resolve many of the imbalances in the economy,

[52] For papers on many of the issues involved in conversion, see *Conversion: Economic Adjustments in an Era of Arms Reduction*, (vol.1), Disarmament Topical Papers, No.5 (United Nations publication, Sales No. E.91.IX.6).

[53] *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), p.174. For a fuller discussion of conversion in the Soviet Union, see A.-Samorodov, "Conversion of the Soviet defence industry and its consequences for labour", *International Labour Review*, vol.129 (1990), pp.555-572, and for a cross-country study, see *Defence Expenditures, Industrial Conversion and Local Employment*, L.Paukot and PeterRichard, eds. (Geneva, International Labour Office, 1991).

[54] *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press), p.174.

[55] *Ekonomicheskie nauki* (Moscow), No.4 (April 1990), pp.58-66, and *Poisk* (Moscow), No.10 (8-14 March 1990), pp.4-5.

[56] Details in *The New York Times*, 20 June 1990.

[57] For instance, in April 1991, the United States finally gave the contract for a new generation of agile, radar-evading fighters to a team led by the Lockheed Corporation. The cost of the 650 planes could be over $95 billion (*The New York Times*, 24April1991).

[58] A more recent assessment is that funds for the military would be reduced by 20 per cent over the five years (*The New York Times*, 7 April 1991).

[59] S. Deger and S. Sen, *Military Expenditure: The Political Economy of International Security*, SIPRI Strategic Issue Papers (New York and Oxford, Oxford University Press, 1991).

particularly the budget deficit. Over time, it would permit a substantial reallocation of resources within society and would allow for physical investment in such areas as the environment and education that would enhance welfare and the long-term growth potential of the economy. It would also provide resources for assistance to the developing countries and the economies in transition. Yet, to take advantage of the reduction in military spending will require decisions to be made at a national level to ensure that the reduction in demand caused by the fall in military spending is "not dissipated in lower levels of economic performance".[60]

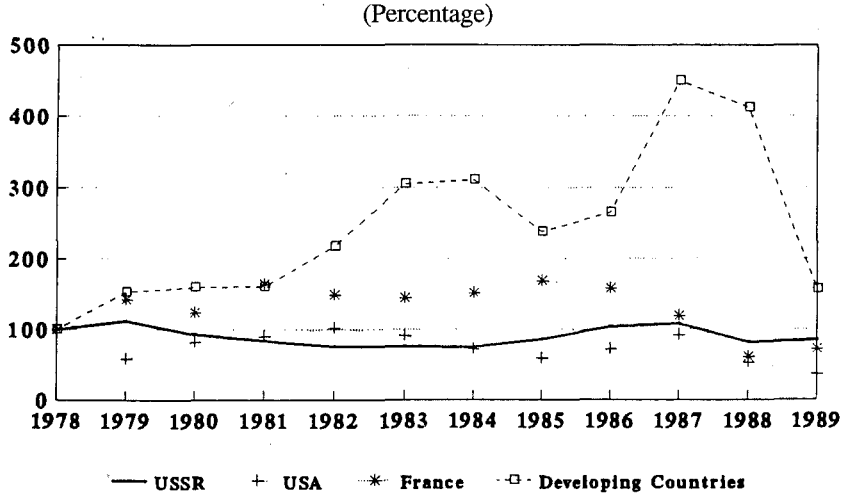
### Some issues involved in the transition to lower military expenditures

Although military spending in the two largest military powers and their present or former allies is set to decline, in other countries it is set to rise. As noted earlier, military expenditure in several parts of Asia has expanded recently. In 1990 and1991, China announced increases in budget outlays for the military.[61] In 1989, the Far East and South Asia apparently imported more major weapons than did the Middle East, which had previously dominated the arms market. In the case of these arms build-ups, the motive does not seem to be to protect against domestic violence but rather to defend their economic space and, in some cases, their offshore resources.[62] Recent proposed arms deals following the Gulf war-amounting to $18 billion-could lead to a renewed arms race in that region.[63]

The transition to lower military spending at a global level does not then just involve the end of the arms race between the two largest military powers, but also the ending of arms races or decreases in military expenditures in many different areas of the world. This matter can be expected to engage the increasing attention of the international community. With the cold war ending so swiftly, it was perhaps inevitable that it would take time for its implications to be digested. As yet, however, a profound reassessment of security needs and of the role of military expenditure in meeting them has barely begun. In the Soviet Union, such a profound reassessment took place in the mid-1980s and resulted in dramatic domestic and foreign policy changes. Similar dramatic changes could result from policy reviews in many areas of the world.

At the same time, however, disarmament necessarily has international as well as domestic dimensions. As pointed out earlier, enhancing collective security is of vital importance. Stemming the arms race in many regions of the world itself would require an international effort to ensure that the excess inventories of arms resulting from present and future force reductions in the major military powers were not disposed of by sales to other countries. There is also concern that arms manufactur-

Figure VIII.3. Trends in the volume of major arms exports to developing countries




*Source*: *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990).

[60] David Gold applied R. P. Smith's economic model (see note 32) to data on the United States between 1948-1988 and found that Smith's relationship held for the period 1948-1971 in that the regression coefficients showing the trade-off between military expenditure and different measures for investment were significant and negative although they had a value only between -0.2 and -0.25.

[61] *The New York Times*, 22 March 1990 and 27 March 1991.However, in the period 1972-1988, there was no significant relationship. He concluded that "broad patterns suggest this long term 'peace dividend' has been used in part to stimulate consumption, and in part has been dissipated in lower levels of economic performance" (David Gold, "Military spending and investment in the United States: where is the trade-off", paper prepared for the Economists Against the Arms Race/Institute for International Peace Studies Conference "Economic issues of disarmament", University of Notre Dame, Notre Dame, Indiana, 30 November-1 December 1990).

[62] Ibid., 6 May 1990.

[63] *Financial Times*, 19 March 1991.

ers might try to promote aggressively arms sales in developing countries in order to make up for a shrinking domestic market.

### Arms transfers

The arms trade to developing countries is dominated by the Soviet Union and the United States,[64] but other developed market economies, in particular France and the United Kingdom, are also significant exporters. Any serious attempt to stem arms transfers would have to involve them. However, any international efforts to control the transfer of arms, particularly to countries in conflict, would also have to involve many other countries, including developing country suppliers. The latter have increased their supplies during international conflicts and their exports to countries at war have been a much higher percentage of their total arms exports than in the case of the major suppliers.[65] Figure VIII.3 indicates that between 1978 and1988, supplies by the three major exporters fell in real terms or increased much less rapidly than did the supplies of the developing countries, including China. The largest arms market during that time was the Middle East, which was dominated by the demand generated by the Iran-Iraq war.

### Technological development

The Iran-Iraq war saw the use of chemical weapons and ballistic missiles. The combination of the two-the delivery of chemical warheads by ballistic missiles-has focused international attention on the potential of developing countries to develop their own advanced weapons systems. In 1987, concerned about the spread of ballistic missiles, the Group of Seven nations[66] established the Regime to prohibit exports of ballistic missiles and related technologies. Other members of the Organisation for Economic Cooperation and Development (OECD) have joined the Regime.

It can be argued that the Missile Technology Control Regime will be "dismissed by developing countries as another example of efforts by the 'rich man's club' to govern the world".[67] Notwithstanding, the issues raised by the Regime are likely to be fundamental to the development process and to the process of disarmament. In some cases, the development of ballistic missiles resulted from prior civilian research in space technology. The space programmes of Argentina, Brazil, India and Pakistan preceded their missile programmes by several years,[68] and benefited from foreign consultation and technology. In general, it is felt that advanced technology is "neutral" and "has often both civilian and military applications that cannot be neatly separated".[69]

The developed market economies have invested heavily in military research since the Second World War and can be expected to seek to maintain a qualitative edge in military capabilities.[70] At the same time, the countries that are now becoming more closely integrated in the world economy, particularly China, the economies in transition and the higher income developing countries, expect to benefit from the freer flow of technology and the removal of barriers to technological cooperation that is an essential part of a more integrated world economy. They can also expect to establish their own technological infrastructure and to make technological breakthroughs.

This technological cooperation could be threatened if attempts by the developed market economies to maintain their lead in military technology and prevent the spread of weapons technologies resulted in slowing down the technological advance of the developing countries and the closer integration of China and the economies in transition in the world economy. This is an issue which calls for international cooperation and dialogue for a solution that will protect the interests and allay the fears of all parties.

It is also an issue that should command increasing attention in arms reduction negotiations, because more and more the quality of the weapons, not simply their numbers, will be matters of discussion.

## Conclusion

As arms reduction negotiations proceed, they can be expected to become more complicated and involve more parties. The difficulties in ratifying an agreement on conventional forces in Europe is perhaps a sign that progress might be slower than originally hoped for.

However, a temporary slow-down should be seen in the context of what the end of the cold war means for the prospects of global peace, disarmament and cooperation. Although the cold war can be seen as an unfought war over the division of Europe, it affected not just relations between the world's two most powerful military nations, the Soviet Union and the United States, but also between them and third countries, especially developing countries.

The Soviet Union and, for a long time, other Eastern European countries, did not participate in the International Monetary Fund or the World Bank, even though several of them had attended the Bretton Woods Conference which established those bodies. Their non-participation was a clear indication that the differences between the two major alliances were not solely political but also ideological and concerned views on the scope of international

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[64] The Arms Control and Disarmament Agency data showed that 62 per cent of arms transfers to developing countries between 1978 and 1988 came from the Soviet Union and the United States (United States Arms Control and Disarmament Agency, *World Military Expenditure and Arms Transfers, 1989* (Washington,-D.C., Government Printing Office, 1989), p.14); according to *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), 67 per cent of major weapons exported to developing countries in 1989 came from these two countries (p.253).

[65] See *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), table 7.8, p.248.

[66] Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

[67] *SIPRI Yearbook, 1990* (New York and Oxford, Oxford University Press, 1990), p.243.

[68] United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers, 1988* (Washington, D.C., Government Printing Office, 1988), p.19.

[69] Y. Akashi, "General summary", *Science and Technology and Their Implications for Peace and Security*, Disarmament Topical Papers, No.2 (United Nations

cooperation in economic and financial matters and the most appropriate path that the non-industrialized and poorer countries should take to achieve socio-economic development.

These differences affected security arrangements, aid and military assistance being extended to countries because of strategic considerations. Moreover, although the major participants in the cold war did not take a direct part in many conflicts in the developing countries, they often contributed to arms build-ups.

With the end of ideological confrontation over economic, financial and development issues within the United Nations system and the increased cooperation between the permanent members of the Security Council in seeking to end regional conflicts, a very real opportunity exists for global reductions in military expenditures and major progress towards a durable peace.

The Gulf war of 1991 provided reasons for sober reflection: countries can still commit acts of aggression and sometimes the international community will authorize the use of force. However, as discussed above, the essential reasons for optimism about the prospects of disarmament at a global level remain: the cold war in Europe has ended and force reductions will be taking place in the major military powers. This presents an opportunity for all countries to reassess their military postures and defence needs and to take steps, often in a regional setting, to reduce armaments expenditures. In this way, what might otherwise be simply another lull in the arms race, could be translated into a permanent path towards lower military expenditure and greater global cooperation.

The Gulf war temporarily diverted attention away from the potential "peace dividend"; in the wake of the war, the automaticity and credibility of collective security has to be enhanced and, in the end, this could require the use of military force. However, the "peace dividend" has not been a victim of the Gulf war. Rather, its full realization is itself dependent upon progress towards a viable peace and a world in which disputes between and within nations are not solved by armed forces and in which armed forces are kept at minimum levels.

The Gulf war established that all countries must be active participants in this search for global security, that levels of military forces and of military spending by individual countries and of progress in the development of new weapons are of legitimate interest to the global community. At the same time, disarmament will release substantial economic resources that could be available for peaceful development and for investment in both the developed and the developing countries. The list of unmet social needs-nutrition, health, education, environmental protection, basic infrastructure and debt relief-is long and the $1,000 billion that is spent annually on the military constitutes a massive amount of resources that largely could and should be applied to meeting those needs.

# CHAPTER IX

# SPECIAL ISSUES

## A. POVERTY AND THE SOCIO-ECONOMIC ATTAINMENT OF WOMEN

The participation of women as equal partners in national development not only enhances their productivity and earnings potential but also raises women's living standards and contributes to better economic performance, the reduction of poverty and improved family welfare. Although women in many countries today tend to be better educated, more active economically and more successful professionally than they were a few decades ago, women continue to be at a disadvantage. Family codes, inheritance laws and labour legislation still discriminate against women in most countries and throughout the world cultural traditions and a lack of equal opportunities limit their socio-economic and political attainment. This section focuses on poverty and other aspects of women's socio-economic position: labour force participation, occupational distribution, education, health and nutrition. It also analyses women's roles in local environment-related issues.

### Poverty

Poverty in general, and the poverty of women and children in particular, remains a major development challenge. Women play a central role in producing food, generating income, bearing and raising children, and in overall household production. They are a key force in reducing hunger and poverty, promoting family welfare and contributing to overall economic development in the developing world. As labourers for hire and on the family farm, women play a major role in food production. They produce more than half the food in the developing countries and as much as three fourths in Africa; they probably account for more than 90 per cent of all time spent processing and preparing it. They play a substantial part in storing, processing and marketing food and cash crops, and they often take care of small livestock. In India, for example, women provide 75 per cent of the labour for transplanting and weeding rice, 60 per cent for harvesting and 33 per cent for threshing.[1] In Bangladesh, apart from harvesting activities, they are responsible for the post-harvest work, including the processing of rice. In addition, women are the primary collectors of fuel and water, which poor people generally must provide for themselves in the absence of public services. Moreover, women bear the major responsibility for ensuring the nutrition, health and cognitive development of children during their crucial pre-school years.

In spite of their economic contribution, the weight of poverty falls heavily on women. They are often the poorest of the poor. Female members of a poor household are usually worse off than male members because of gender-based differences in the distribution of food and other entitlements within the family.[2] In poor households they often shoulder more of the workload than men, are less educated and have no access to remunerative activities.

Poverty in the developing countries has been aggravated and often caused by wars and social unrest. In Africa, Central America and the Middle East, conflicts have led to the death and displacement of millions of people, destroyed infrastructure, disrupted agriculture and damaged the environment. Those directly affected by armed conflicts - those killed or wounded - are largely men. But most refugees are widowed or abandoned women with children who have been forced to flee their communities. Without the means to support themselves, many survive in refugee camps in their own or neighbouring countries, with the help of international relief agencies. The Office of the United Nations High Commissioner for Refugees has estimated the global refugee population at about 15 million, approximately 80 per cent of whom are women and children. Inadequate food rations cause health problems for refugee women and children, who are particularly susceptible to nutritional deficiencies, particularly lack of iron, calcium, iodine and vitamin C. Waterborne diseases tend to afflict refugees and displaced people especially women, who are the primary collectors of water. Overcrowding and poor sanitation compound the problems.

Over the past decade, the search for durable solutions to help refugees achieve self-reliance has become increasingly urgent because of the enormous growth in the number of refugees in Africa and West Asia. However, aid has not been tailored to the characteristics, skills or needs of the majority of the adult refugee population. Most refugee assistance intended to solve the problems of dependency has been directed towards men, who play a secondary role in the organization and support of refugee families.[3] A new approach is needed to reach the bulk of adult refugees and their families and to design major training and employment-generating programmes based on the existing or potential productive abilities of women.

A rapidly rising minority of women have become the sole support for their families, a phenomenon that occurs in both developing and developed countries. About one third of all households in the developing world are headed by women. In some regions, such as in rural Africa and the urban slums of Latin America, the number is closer to half. A large proportion

[1] Gerd Holmboe-Otteson, Ophelia Mascarenhas and Margareta Wandel, "Women's food chain activities and implications for nutrition: problems and policy issues" (United Nations, 1986).

[2] See UNDP, *Human Development Report 1990* (Oxford and New York, University Press, 1990), pp. 31-32; and World Bank, *Poverty: World Development Report 1990* (Oxford and New York).

[3] Eve Hall, "Vocational training for women refugees in Africa", *International Labour Review*, vol. 129, No. 1 (Geneva, ILO, 1990), pp.91-107.

are landless, unskilled, illiterate, unemployed or underemployed. One of the problems confronting the growing numbers of rural women workers is their limited access to land. In nearly all of the regions of the developing world, women face legal restrictions against inheriting land. Furthermore, poor rural women are denied capital, short-term credit, technical assistance and training because they are not officially categorized as "productive". Women's farm work is seen as a natural extension of rural household work, and it often goes unrecorded statistically.

Households headed by women in the developed countries are also poorer than those headed by men. In the United States, 53 per cent of poor families are supported by a woman with no spouse present, and nearly one in every four children under the age of six is currently brought up in poverty.[4] Yet, gender inequality is more pronounced in the developing societies, particularly in rural areas. This inequality is evident in the female-male disparities in the share of women in the labour force, in illiteracy rates and educational levels, and in health and nutrition.

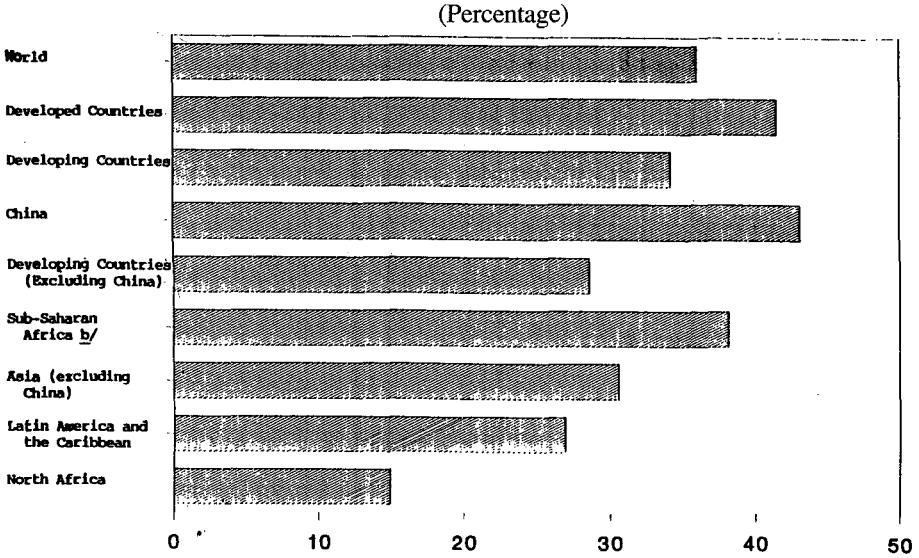
## Labour force participation

Gainful employment, as opposed to unpaid housework, can substantially enhance the economic situation of women. An increase in income increases a woman's status within the home and may lead to shifts in the allocation of household resources among expenditures or among household members. Outside employment improves the treatment that women get in society in general and in the household in particular.[5] The social respect that is associated with being a breadwinner raises a woman's status in the family and may influence the prevailing cultural traditions regarding the division of joint benefits. Furthermore, when outside employment takes the form of jobs with some security and legal protection, the economic position of women is much less vulnerable.

The possibility of gainful employment can also counter the relative neglect of girls as they grow up. Boys are often preferred because they are expected to provide more economic security for their parents in old age; but the force of this bias can be weakened if women can work regularly at paid jobs.

Women's economic options vary widely in different cultures and in countries at different stages of economic development.[6] However, with further development, women are increasingly drawn into market employment. Figure IX.1 is consistent with this view of the relationship between economic development and labour force participation. On a global basis, 36 per cent of women over the age of 15 are in the labour force; they comprise about one third of the labour force. Women's share in the labour force is highest in the developed countries: 41 per cent as compared to 34 per cent in the developing countries. The number of part-time workers in the industrialized market economies has grown by about 30 per cent in the past 10 years. The growth of part-time work is clearly related to the increased participation of women in the labour force, who mostly hold part-time jobs

Figure IX.1. Share of women in the labour force, 1990[a]




Source: ILO, *Economically Active Population - Estimates, 1950-1980 abd Projections, 1985 - 2025*, vol. V (Geneva, 1986).

[a] Weighted averages.

[b] Including Nigeria.

[4] United States Bureau of the Census, *Money, Income and Poverty Status in the United States, 1988* (Washington, D.C. United States Department of Commerce), p. 8; see also National Center for Children in Poverty, *Five Million Children: A Statistical Profile of Our Poorest Young Citizens* (New York, Columbia University, 1990), p. 27.

[5] Veronica F. Nieva, "Work and family linkages", in Laurie Larwood, Ann H. Stromberg and Barbara A. Gutek, eds., *Women and Work*, vol. 1 (1985), pp. 162-190.

[6] Even in developed countries significant barriers remain. In the co-operate culture of the industrialized countries, women face hurdles to advancing to top management because of stereotyping and unwillingness to risk promoting a woman. Few women in these countries have cracked the "glass ceiling" - that invisible barriers which seems to block women from achieving the heights of economic decision-making. (See "The glass ceiling: can the Feds bust through?", *Business Week*, 29 April 1991, and "Women at work", *Financial Times*, 7 May 1991).

so that they can also attend to family responsibilities. There are now more than 50 million part-time workers in the industrialized market economies alone, and in some countries nearly half of all working women are part-timers.

There are two reasons for the positive association between female labour force participation and economic development. First, an increase in the wages that women can potentially earn in market employment increases the probability that they will enter the labour force.[7] The tendency of women to substitute market work for housework as their own wages rise outweighs the positive income effect on the demand for leisure on account of the husband's higher earnings. Thus, rising real wages of both men and women in the course of economic development induce more women to work for pay. Rising educational attainment of women and the shift from a goods - producing to a service economy tend to have similar effects because they increase the potential wage women can earn in the market.

Second, female labour force participation is negatively related to the number of children present, especially when paid work is not readily combined with child care. Hence, as birth rates decline in the course of development, female labour force participation tends to increase.

Government policies also play a role.[8] For instance, in a progressive tax system, women married to men with high incomes have more incentive to enter the labour market when the husband and wife are taxed as individuals (so that the tax rate of each is not influenced by the earnings of the other) than when they are taxed as a couple. Similarly, when child care is subsidized by the Government, mothers of young children are more likely to seek employment.

In developing countries, female labour force participation is low as traditionally measured. Women's participation and contribution to the national product, especially through their activities in the informal sector, is insufficiently covered by national statistical systems. The underenumeration of women's economic activity is partly due to the inadequate coverage of the informal sector in general. Labour statistics certainly do not present a full or complete picture of women's unpaid production work. Even women working in family enterprises, often classified as unpaid family workers, have to work more hours in order to be included in the labour force than do men, who are generally classified as self-employed.[9]

The growing awareness of the importance of unpaid labour by women in developing countries has resulted in studies that attempt to quantify this economic contribution. These studies measure the activity either by the number of hours women spend at work, the economic value of this time, the volume of their production, or the value of what they produce.

Women's economic contributions include home production of non-marketed goods and services that support the economic participation, health and well-being of all family members. Where it has been measured, women's portion ranges from 10 per cent to 58 per cent of full household income.[10] In another study, women's household production is estimated to be 25-40 per cent of the world's gross national product.[11] Most of this labour and its output is not marketed and is therefore not counted in standard estimates of GNP.

Women's economic contributions count most in poor families. Women in poor families contribute proportionately more to household income through domestic and paid work than do wealthier women. In the Peruvian sierra, for example, women from families with little land provide 35 per cent of family labour in agriculture, whereas women from middle income or rich farm families provide only 21 per cent.[12]

The world-wide recession of the 1980s and the severe food production crises throughout much of sub-Saharan Africa has added to the burden of poor women in the developing world who are responsible for the welfare of their household.[13] Few low-income women have the option of devoting themselves exclusively to nurturing their children, even during the first year after childbirth. Child-care responsibilities during the reproductive years are a major reason for the high proportion of women in informal-sector jobs, many of which are low paying and insecure.

Globally, most women are still clustered in low-skill service or clerical jobs with little potential for advancement. Table IX.1 shows a large percentage of women in the professional/technical, clerical/service and sales labour force and a small percentage in the manufacturing/transportation and the, administration/management labour force.

The contribution of women to activities closely related to human development is known to be substantial. More than half of the first-level teachers in the world are women (see table IX.2). In 1988, women made up 75 per cent of the first-level teaching staff in the developed countries and 77 per cent in Latin America. They made up 49 per cent of the first-level teaching staff in North Africa and 43 per cent in the Middle East and Asia. The percentage of women teachers at the second level is lower for all regions, since women are usually clustered in low-level jobs. But women teachers serve as motivators and role models and promote the increased participation of girls in school and other educational programmes.

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[7] Richard Layard and Jacob Mincer, eds., "Trends in women's work, education and family building", *Journal of Labor Economics*, vol. 3, No. 1, part 2 (January 1985).

[8] Francine D. Blau and Marianne A. Ferber, "Women's work, women's lives: *a comparative economic perspective*", National Bureau of Economic Research, Working Paper No. 3447 (September 1990), p.7.

[9] Lourdes Beneria, "Conceptualizing the labour force: the underestimation of women's economic activities, in *African Women in the Development Process*, Nici Nelson, ed. (London, Frank Cass and Company, 1981), pp. 10-28.

[10] Judith S. McGuire and Barry M. Popkin, "*Helping women improve nutrition in the developing countries*", World Bank Technical Paper No. 114 (Washington, D.C., May 1990), p.5.

[11] R. L. Sivard, "Women: a world survey" (Washington, D.C., World Priorities, 1985).

[12] M. Buvinic, M. Lycette and W. P. McGreevey, eds., *Women and Poverty in the Third World* (Baltimore, The Johns Hopkins University Press, 1983).

[13] Joanne Leslie and Michael Paolisso, eds., *Women, Work, and Child Welfare in the Third World*, American Association for the Advancement of Science Se-

Table IX.1. Percentage of women in different occupations in the 1980s

| | Professional/ technical | Clerical/ service | Sales | Manufacturing/ transportion | Administration/ management |
|---|---|---|---|---|---|
| Developed regions | 47 | 63 | 48 | 18 | 18 |
| Latin America and the Caribbean | 49 | 58 | 47 | 17 | 20 |
| Africa | 34 | 35 | 42 | 18 | 13 |
| Asia and Pacific | 37 | 38 | 29 | 17 | 10 |

Source: UN/DIESA, based on Women's Indicators and Statistics Data Base (WISTAT).

Note: The percentages show the unweighted averages of a number of countries in each region.

Table IX.2. Female teaching staff in first-and second-level education, 1980 and 1988

| | Percentage of total teaching staff | | | |
|---|---|---|---|---|
| | First level | | Second level | |
| | 1980 | 1988 | 1980 | 1988 |
| World | 52 | 55 | 39 | 43 |
| Developed countries | 74 | 75 | 50 | 53 |
| Developing countries | 44 | 48 | 31 | 36 |
| Latin America and the Caribbean | 77 | 77 | 47 | 49 |
| North Africa and the Middle East[a] | 42 | 49 | 32 | 37 |
| Sub-Saharan Africa | 32 | 34 | 25 | 30 |
| Asia | 39 | 43 | 28 | 34 |

Source: UNESCO, Statistical Yearbook, 1990 (Paris, 1990), table 2.5.

[a] Including Somalia and the Sudan.

## Education

An issue of great concern is that of parity between the sexes in access to educational opportunities. Education for women is both a development issue and an equity issue. Evidence from a variety of socio-economic settings suggests that the economic returns on female education are substantial and comparable to those on male education. The current labour force participation, occupations and earnings of women are largely related to their low levels of education. Female education could help to improve health, decrease the birth rate, reduce illiteracy and, in general, improve living standards.

Although many developing countries are committed to expanding and improving education, many cannot keep pace with the rapid growth of the school-age population. The numbers who remain illiterate or without adequate schooling have increased rapidly. In 1990, more than 100 million children had no access to primary schooling and at least 60 million of those children were girls. Of the 960 million illiterate adults in the world, 640 million, or two thirds, are women. As shown in figure IX.2, in 1990 for the developing countries taken as a whole, the female illiteracy rate was 45 per cent, compared with 25 per cent for males. The disparities vary, however. In Latin America and the Caribbean the literacy rate for females is gradually catching up with that for males. The female illiteracy rates in sub-Saharan Africa, North Africa and the Middle East, and Southern Asia are now above 60 per cent, while the rate for males varies between 35 per cent and 41 per cent. If current trends continue, one female adult out of two will still be illiterate in these three regions in the year 2000.

In the developed countries, females have achieved parity in enrolment to all three levels of education (see figure IX.3). In the developing countries, parity in enrolment has not been achieved at any level. But the situations are different in the various regions.

In Latin America and the Caribbean, there was parity between the sexes in enrolment at the first and second levels of education in 1988. The sex disparity that exists at present in the third level is projected to be eliminated by the end of the century. Girls' primary-school enrolment rates are lower than those of boys in sub-Saharan Africa, North Africa and the Middle East, and Asia. But the higher the level of education, the greater the disparity for those regions, particularly at the post-secondary level, where much professional and vocational training is taking place.

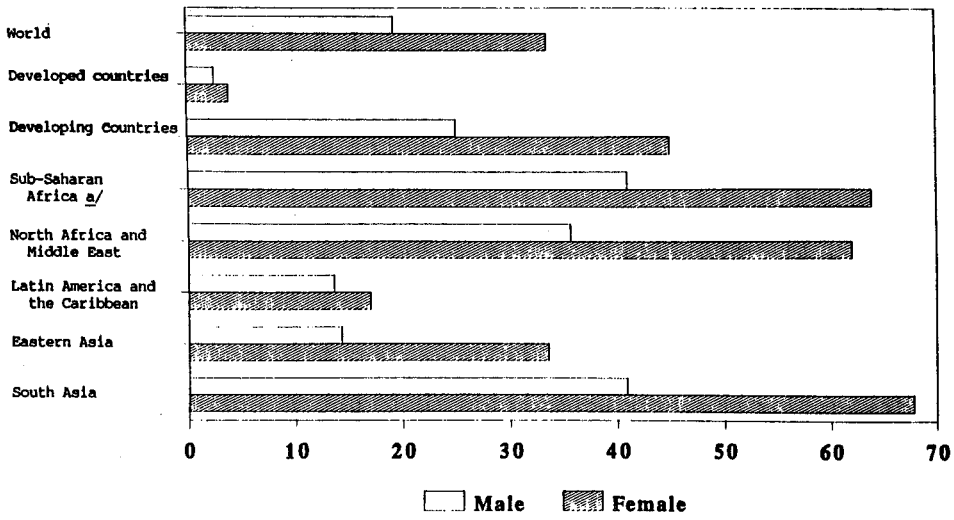
Economic realities in the developing countries often require sending boys to school while girls stay at home to care for younger children and to help their mothers in the field, gather fuel and carry water. FAO studies indicate that girls between the ages of 10 and 14 contribute 22 per cent of family labour, while boys in the same age group contribute only 6 per cent.[14] The fact that female skills command less pay than the comparable skills of the male is recognized by parents and tends to shape their decision not to invest in the education of their daughters.[15] Other factors, such as the distance from school, the lack of women teachers and schools for girls, the lack of toilets and other facilities, the absence of an immediate economic pay-off and an inability to meet such school expenses as clothing and transportation, are all discouraging elements.

[14] FAO, "Women in agricultural development: FAO's Plan of Action" (Rome, 1990), p.27.

[15] UNICEF, "The girl child: an investment in the future" (New York, August 1990), p.23.

Figure IX.2. Illiteracy rates by sex, 1980

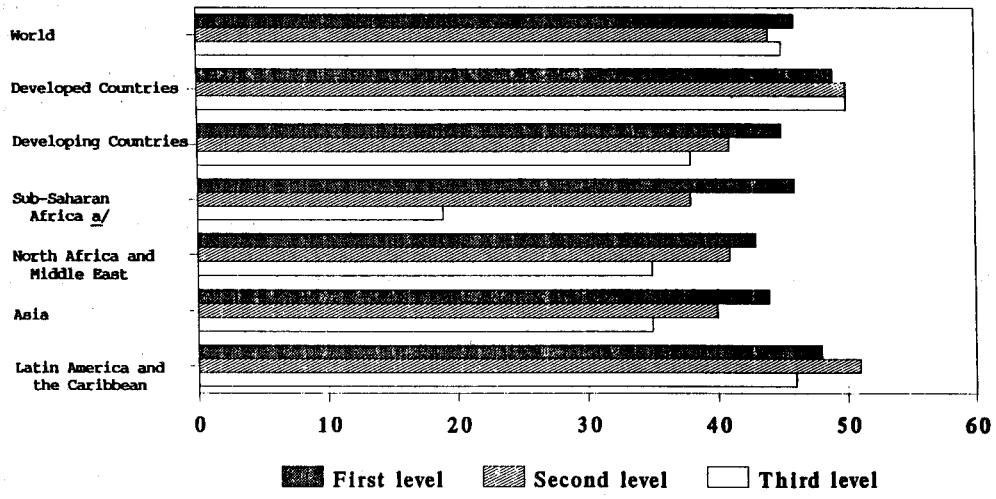
(Percentage)




Source: UNESCO, *Compendium of Statistics on Illiteracy, 1990* (Paris, 1990).

a/ Including Nigeria.

Figure IX.3. Percentage of females in total school enrolment, 1988




Source: UNESCO, *Statistical Yearbook, 1990* (Paris, 1990).

a/ Including Nigeria.

## Health and nutrition

Many of the tasks that women perform as home-makers and mothers are critical for the prevention and treatment of childhood diseases and malnutrition. Women are the crucial link between the family and the traditional and modern health systems. In developing countries, at least 75 per cent of all health care takes place within the family. Women, particularly in their role as mothers, carry the responsibility for family health. Women treat common diseases and injuries and take children and the sick to health centres.

One study of health-seeking behaviour in 16 developing countries found that women most often make the initial decisions about health-care use (including self-care), except in crisis situations involving substantial sums of money. In the latter case, the male head of household becomes involved.[16]

Rural or urban workloads and household responsibilities place a heavy physical and mental strain on poor women of all ages. Despite considerable convergence in female and male mortality at the youngest age, mortality is still higher among girls than boys. A WHO study reveals that their higher mortality in early childhood can be explained partly by the fact that girls are given less care because of their lower status.[17]

Women are also predisposed to illnesses related to their reproductive roles. These include sexually transmitted diseases, the after-effects of clandestinely induced abortions, the physical toll of adolescent and repeated pregnancies, contraceptive side effects, malnutrition and anaemia. The probability of dying in pregnancy is 50 to one 100 times greater in many developing countries than in the developed countries. The lifetime risk that a women will die in pregnancy primarily from infection, haemorrhage, toxaemia, obstructed labour or primitive abortion may reach 1 in 20 because of multiple pregnancies.

Women are particularly vulnerable to infection, and nowadays the human immunodeficiency virus (HIV) poses a growing threat to the health and survival of young women and their offspring.[18] It is estimated that one third of all those thought to be infected-about 2 million-are women. The number of infected women may overtake the number of infected men by the mid-1990s. WHO estimates that by early 1991, more than 500,000 paediatric AIDS cases resulting from perinatal transmission may have occurred, over 90 per cent of them in sub-Saharan Africa. Perinatal transmission of HIV-that is, spread of HIV from an infected mother to her foetus or newborn baby-occurs in approximately one third of all pregnancies. The problem of perinatal transmission has become acute and it is projected that for the year 2000 over 80 per cent of all global HIV infections will result from heterosexual intercourse, with more than 3 million women estimated to be infected.

Women's lack of status within the family and society heightens their vulnerability to infection and to other consequences of pandemic diseases. The coping options for women, young girls and children are few, and increasing poverty contributes to the growing numbers of girls who become prostitutes to secure better income. According to one study in Bombay, India, 20 per cent of an estimated 100,000 prostitutes are minors.[19] Data from Thailand indicate that there are 800,000 girl prostitutes under the age of 16.

The AIDS pandemic will have a particularly dramatic impact on the developing countries, in particular lower-income countries and poorer groups within those countries. The already overburdened health facilities in the developing countries risk being completely overwhelmed. An even larger cost will result from the loss in productive labour. In Africa and elsewhere, AIDS is most prevalent among persons in their prime and will victimize women in particular. A recent study indicates that in Africa the ratio of male to female infection is about 1.0:1.2, but women who die of AIDS will lose more years of expected life than males, since they contract the disease at earlier ages.[20] Particularly stunning is the projection that a women who reaches age 20 in central Africa around the year 2010 will have a 15 per cent chance of dying of AIDS by her thirtieth birthday.[21]

Although women play a major role in food production and processing, they often suffer from inadequate nutrition. It is estimated that 350 million women in the world have nutritional anaemia.[22] One aspect of the distribution of food in low-income settings that has caught the attention of many social scientists is the disparity between the nutrients received by women and men.[23] Only 20 - 45 per cent of women of child-bearing age in the developing world have a daily diet of 2,250 calories (as recommended by the World Health Organization), let alone the extra 285 calories per day needed during pregnancy. In Bangladesh, the United Nations Population Fund has found that boys under 5 years age are given 16 per cent more food than girls of the same age. In India boys are fed far more fatty and milky food than girls. According to the same study, girls are four times as likely to suffer from acute malnutrition, but 40 times less likely to be taken to a hospital.

While poor women generally lack most resources, one that stands out is time. The multiple roles of rural women, who have both domestic and agricultural responsibilities, means that they often have a long working day. Most studies put the daily workload of rural women in developing nations at 15-16 hours. At seasonal peak periods, such as harvesting, it may be longer. Rudimentary utensils and procedures for food preparation and the lack of nearby sources of fuel and clean water make their household tasks more time-consuming. Participation of women

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lected Symposium 110 (Washington, D.C., 1989), pp. 4-5.

16 Judith S. McGuire and Barry M. Popkin, op. cit.

17 WHO, *World Health Statistics, Quarterly Report*, vol. 40 (Geneva, 1987), pp. 194-213.

18 See Elizabeth Reid, "Young women and the HIV epidemic", in *Development: Journal of the Society for International Development, Special issue on Young Women: Production/Reproduction and Life Choices*, 1990, No. 1, pp. 16-19.

19 UNICEF, op. cit., p. 18.

20 Charles M. Becker, "The demo-economic impact of the AIDS pandemic in sub-Saharan Africa", *World Development Report*, vol. 18, No. 12 (1990), pp. 1599-1619.

21 Ibid.

22 UNICEF, *The State of the World's Children 1991* (Oxford and New York, Oxford University Press, 1991), p. 64.

23 Jere Behrman, "Intrahousehold allocation of nutrients and gender effects: a survey of structural and reduced form estimates", *Nutrition and Poverty* in Siddig

in economic development programmes is usually hampered by a lack of time and energy.

Investing in the household's human capital through nutrition, health and education programmes is the basis for greater participation and growth, but programmes must fit women's schedules to be effective. In addition, empowering poor women to expand their economic and social participation through community-based projects and other schemes that give them greater control over their own destinies is of paramount importance for development. Targeting economic and other policies and resources to improve women's status and enhance their productive capacity should help to reduce poverty and contribute to stable long-term growth.

## Women as managers of scarce natural resources

In many countries, women play critical economic roles that have lasting environmental implications. These roles are also central to the linkages between development and environment. Women are also often the primary victims of environmental degradation.

Rural women depend on natural resources, including soil, water and forests, for family survival and for their livelihood. They are the main users and managers of natural resources over much of the developing world, and as food producers and gatherers of fuel, fodder and water, they are especially affected by the deterioration of the physical environment. In urban areas as well as rural, women use water and other resources more than men. With their traditional knowledge and resource management skills, it is possible to see women as key agents for the "primary environmental care" needed for sustained development.

Much of the wood consumed in the developing countries is for fuel, the major source of energy. Most African countries derive over 60 per cent of their total energy supply from traditional fuels, and fuelwood in some countries accounts for more than 80 per cent.[24]

The rural poor are being pushed into increasingly marginal areas, which are further degraded by over-use and lowering yields. Many tracts of forest and woodland, especially in Asia and Africa, have been virtually cleared, leaving 100 million people suffering from an acute scarcity of firewood and 1 billion more at risk.[25] The impact of deforestation in semi-arid and arid zones is particularly severe: demand for fuelwood is high but the regeneration of woody vegetation is slow. Women are affected by deforestation since they are the primary gatherers of fuelwood. They often have to walk up to 10 kilometres and spend five to eight hours every four to seven days collecting wood for fuel. This task, along with fetching water, can consume 400-500 calories per day, substantially decreasing the time and energy women have to do other work. This drain on their time and caloric supplies disrupts women's lives profoundly. When confronted with environmental degradation that reduces the availability of fuelwood or water, or the productivity of the land, poor women have no other recourse but to work harder in an effort just to stay even. For instance, over the past decade, forests in Nepal have receded to half their original extent; therefore, women's daily journey for firewood has increased by more than an hour, their workday in the fields has shortened, family incomes have fallen, and diets have deteriorated.[26]

As the survival of humanity is intertwined with environmental preservation, the links and interactions between improvement of the situation of rural women and environmental protection become increasingly critical. The principal victims of environmental degradation are the poor, and the majority of these are women. Unless conscious and concerted efforts are made to integrate women's interests, environmental preservation and poverty alleviation in a coherent strategy, economic development will be lopsided and fail to meet key objectives.[27]

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R. Osman, ed. (Oxford and New York, Oxford University Press, 1990).

[24] United Nations Sudano-Sahalian Office, "Drought and desertification in the context of the United Nations Programme for Action for African Economic Recovery and Development 1986-1990" (United Nations, 1990).

[25] FAO, *The State of Food and Agriculture*, (Rome, 1989).

[26] Shubh K. Kumar and David Hotchkiss, "Consequences of deforestation for women's time allocation, agricultural production, and nutrition in hill areas of Nepal, (Washington, D.C., International Food Policy Research Institute, 1988).

[27] It is important to note that in some cases women have taken a leading role against environmental deterioration. In Asia and Africa, women are leading the efforts to reverse the destruction of forests. Kenya's Green-belt Movement has established 50 nurseries, producing 2,000 to 10,000 seedlings per year and 239 "green belts" throughout the country. Women's organizations are actively involved in the non-governmental Kenya energy organization, whose objectives are to safeguard energy supplies and promote reforestation. In the state of Uttar Pradesh, in northern India, women are increasingly active in the Chipko Andolan movement to plant trees to be used for fuel and fodder.

## B. ENVIRONMENTAL ACCOUNTING AND THE SYSTEM OF NATIONAL ACCOUNTS

A key message conveyed by the concept of sustainable development is that a shift in environmental policies has taken place: from an approach of dealing with environmental problems after their occurrence to an anticipatory approach to environmental depletion and degradation. The objective is to merge environmental issues with mainstream development policies by making these policies accountable for their environmental effects - rather than to attempt to change environmental trends by peripheral environmental policy and management.

Accounting for socio-economic performance and its environmental effects is a first step towards the effective integration of environmental concerns into economic planning and policies. Rigorously defined accounting indicators have generally been used as the main operational variables in the analysis of economic performance, growth and development. Environmentally adjusted indicators can therefore be used in providing operational definitions of sustainable and environmentally sound economic growth and, to a certain extent, development.

As part of the ongoing revision of the System of National Accounts (SNA),[28] the Statistical Office of the United Nations Secretariat is currently developing methodologies for an SNA satellite system of integrated environmental and economic accounting in cooperation with the World Bank and other organizations. It is intended to complete at least an interim version of an SNA Handbook of Environmental Accounting by the end of 1991[29] as a possible reference document for the United Nations Conference on Environment and Development, to be held in Brzil in 1991.

### Modifying the System of National Accounts: a satellite system of integrated environmental and economic accounting

National accounts have a number of drawbacks, which raise doubts about their usefulness for the measurement of long-term environmentally sound and sustainable economic growth and development. These drawbacks include:

(a) Neglect of scarcities of natural resources, which might threaten the sustained productivity of the economy;

(b) Failure to account for the degradation of environmental quality and its effects on human health and welfare;

(c) Accounting for environmental protection expenditures in a manner that tends to increase national product, though it has been argued that such increases should be considered social costs of maintaining environmental quality.

While it is largely true that the conventional national accounts do not present adequate measures of welfare or of sustainable income, they do not purport to do so. However, since no international consensus has yet been reached on how to incorporate environmental costs and benefits in national accounts, it seems premature to radically change SNA, a well-established system of economic accounts that serves many different, in particular short- and medium-term, socio-economic analyses. Other reasons for not replacing the conventional accounts are the experimental nature of environmental accounting and possible inconsistencies in the valuation of non-marketed goods and bads (pollutants) with the values of market transactions. The elaboration of the standards of environmental and natural resource accounting in an SNA satellite system of environmental accounts has therefore been proposed. This approach permits close linkage to SNA without disrupting the core system. The idea is to allow users of economic data to choose among different information systems according to their particular area of interest.

The proposed satellite System of Integrated Environmental and Economic Accounting (SEEA) follows as far as possible the principles and rules established in SNA. It is based on the SNA production boundary, follows its analysis of costs and outputs and incorporates the same accounting identities between supply and use of products and between value added and final demand. However, traditional systems of national accounts, focusing on market transactions, do not record changes in the quality of the natural environment and the depletion of natural resources. These effects are particularly relevant for the measurement of an adjusted concept of value added in production, which is compatible with long-term environmentally sound and sustained economic growth, and of an adjusted concept of net income, which takes into account the welfare aspects of environmental depletion and degradation.

The main objectives of SEEA can be summarized as follows:

(a) Segregation and elaboration of all environment-related flows and stocks of traditional accounts. Satellite accounts, in the narrow sense of detailed accounting for expenditures and revenues in major areas of social concern, have been pioneered in France[30]. There is now an increased interest in identifying separately all flows and stocks of assets in national accounts related to environmental issues and in estimating the total expenditure for the protection or enhancement of the different fields of environment. One of the objectives of such segregation is to permit the assessment of the increasing part of gross domestic product (GDP) that reflects so-called "defensive expenditures". It has been argued that these expenditures distort the final results of economic activity, which should be calculated net of the cost of environmental restoration.[31]

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[28] *A System of National Accounts* (United Nations publication, Sales No. E.69.XVII.3).

[29] After further review by experts in the field and fully reflecting experience gained in pilot projects in Mexico and Papua New Guinea.

[30] Institut national de la statistique et des études Economiques, *Les Comptes satellites de l'environnement: Méthodes et résultats*, Les collections de l'INSEE, Ser. C.130, (Paris, INSEE, 1986).

[31] See for example, C. Leipert, "National income and economic growth: the conceptual side of defensive expenditures", *Journal of Economic Issues*, vol. 23, No. 3, (1989), pp. 843-856.

(b) Linkage of physical resource accounting with monetary environmental accounting and balance sheets. Physical resource accounts aim at covering comprehensively the total stock or reserves of natural resources and changes therein, even if these resources are not (yet) affected by the economic system.[32] The proposed accounting for these resources in SEEA is considered the "hinge" by which comprehensive physical resource accounts can be linked to the monetary balance sheets and flows of SNA. Non-monetary data in physical accounts are thus an integral part of a more comprehensive elaboration of SEEA.

(c) Assessment of environmental costs and benefits. In contrast to the above-mentioned limited approach to satellite accounting, a broader framework for satellite accounting, covering, in addition, external environmental costs and benefits, is proposed in SEEA. Taking the current state of knowledge and data availability into account, SEEA focuses on expanding and complementing SNA with regard to two major issues: (i) the use (depletion) of natural resources in production and final demand and (ii) changes in environmental quality resulting from pollution and other impacts of production and consumption, on one hand, and environmental protection and enhancement on the other.[33] The possibility of extending SEEA for the analysis of environmental welfare effects, that is the "damage costs" of the impairment of human health, recreation and of other aesthetic or ethical values, are further issues under discussion.

(d) Accounting for the maintenance of tangible wealth. The generally advocated paradigm of sustainable development stresses the need to account for the use of both man-made and natural capital in order to identify possible non-sustainable growth and development patterns. SEEA therefore extends the concept of man-made capital (stocks of commodities and fixed capital) to include natural assets. As a consequence, SEEA accounts for the additional costs of the depletion and degradation of those assets, which extends the concept of capital formation into one of capital accumulation. A further extension could also reflect the transfer or "discovery" of natural capital for economic use.

(e) Elaboration and measurement of indicators of environmentally adjusted product and income. Consideration of the depletion of natural resources and changes in environmental quality permits the calculation of modified macroeconomic aggregates, notably an environmentally adjusted net domestic product (EDP). The possibility of introducing the concept of environmentally adjusted national income (ENI), which would account for further health and welfare aspects of environmental impacts, is also under discussion.

## Accounting framework and procedures

An accounting framework for the proposed SEEA is shown in table IX.3. The framework consists of three groups of accounting tables. The supply and use/value-added tables (table IX.3, sects. A and B) describe the flows of goods and services produced and imported (517.4 + 74.5) and their use by economic production activities (224.0) and final demand, that is, consumption (175.0 +42.5), capital accumulation (68.0 + 1.4 + 7.3) and exports (73.7).[34] The balance sheets of economic and environmental assets (table IX.3, sect. C) show the stocks at, and changes of stocks between, the beginning and the end of the accounting period. Table IX.3 also shows that the stock assets of balance sheets are linked to the flow accounts of the use/value-added table via accounts of capital accumulation, which form an integral part of both groups of tables.

The difference between this framework and conventional accounting lies in the introduction of environmental costs of "quantitative" depletion of natural resources and "qualitative" environmental degradation (largely from pollution), mirrored in the expansion of capital asset boundaries to include natural assets. These two aspects of accounting for environmental costs and natural capital are highlighted in table IX.3 by shaded areas.

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[32] See, for example. K. H. Alfsen, T. Bye and L. Lorentsen, *Natural Resource Accounting and Analysis, the Norwegian Experience, 1978-1986* (Oslo, Central Bureau of Statistics of Norway, 1987) for a description of the Norwegian approach to natural resource accounting. The more complex (including i.a. interactions in the biophysical environment) French "natural patrimony" accounts are presented in Institut national de la statistique ét des etudes économiques, *Les Comptes du patrimoine naturel*, Les collections de L'INSEE, Ser. C.137/138, (Paris, INSEE, 1986).

[33] Natural and man-made disasters also affect the quality of environmental assets; accounting for these effects as a result of non-economic phenomena in separate balance sheets is described below.

[34] The figures shown in table IX.3, although based on economic "cornerstone" data of an existing country, are largely fictive and serve illustrative purposes only.

Table IX.3. Framework for integrated environmental and economic accounting (consolidated)

| | | | | | C. Assets | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Produced | | Non-produced | |
| | | | | | Except natural | Natural (biota) | natural assets | |
| | | | | Opening stocks | 991.3 | 83.1 | 1 744.45 | |
| | | | | | + (plus) | | | |
| B. Use/Value Added | Total | Domestic Production (industries) | Final consumption: House-holds | Final consumption: Govern-ment | Capital accumulation: Produced assets: Except natural | Capital accumulation: Produced assets: Natural (biota) | Capital accumulation: Non-produced natural assets | Rest of the world: Exports/ imports |
| Use of goods and services | 591.9 | 224.0 | 175.0 | 42.5 | 68.0 | 1.4 | 7.3 | 73.7 |
| Environmental protection services | (36.2) | (22.4) | (8.8) | (5.0) | (5.0) | (5.0) | (7.3) | |
| Gross domestic product (GDP) | | 293.4 | | | | | | |
| Consumption of fixed capital | | 26.3 | | | -23.0 | -3.3 | | |
| Net domestic product (NDP) | | 267.1 | | | | | | |
| Use of natural assets (environmental costs) | -1.6 | 59.8 | 17.1 | -5.0 | 5.1 | -0.9 | -73.0 | -4.7 |
| Depletion | | (17.5) | (0.7) | | | (-0.9) | (-17.3) | |
| Degradation | (-1.6) | (42.3) | (16.4) | (-5.0) | (5.1) | | (-55.7) | (-4.7) |
| Environmental adjustment of final demand (environmental costs) | | 22.2 | -17.1 | | -5.1 | | | |
| Environmentally adjusted net domestic product (EDP) | | 185.1 | | | | | | |
| | | | | | | + (plus) | | |
| A. Supply | | | | | | | | |
| Goods and services | 591.9 | 517.4 | | | | | | 74.5 |
| Imports of residuals | -1.6 | | | | | | | -1.6 |
| | | | | | | + (plus) | | |
| Revaluation and adjustment to market valuation | | | | | 138.1 | 13.5 | 464 | |
| Other volume changes | | | | | -25.3 | | 22.8 | |
| | | | | | | = (equal) | | |
| | | | | Closing stocks | 1 149.1 | 93.8 | 2 165.5 | |

Source: P. Bartelmus, C. Stahmer and J. Van Tongeren "Integrated environmental and economic accounting: framework for an SNA Satellite System" (to be published in The Review of Income and Wealth).

### Accounting for sustainable use of natural resources

Natural resources are considered part of the tangible wealth of a nation. Therefore, in addition to produced assets of man-made capital goods and stocks of commodities, the framework includes (a) produced, but "naturally" grown, assets of agriculture, forestry and fishing and (b) non-produced natural assets of scarce renewable resources "in the public domain" (i.e., the natural environment), such as marine resources or tropical forests whose growth is considered outside the active managerial control of agriculture, forestry and fishing; non-renewable resources of land, soil and subsoil assets (mineral deposits); and cyclical resources of air and water.

The depletion of natural resource capital by different economic activities is recorded as an environmental cost of those activities and, is shown as a total of 18.2 monetary units for all economic activities (industries: 17.5, and households: 0.7) in table IX.3. Together with the costs of intermediate consumption, environmental depletion costs can be deducted from gross output for the calculation of "sustainable gross value added".[35] In order to maintain the accounting identities of SNA, the same deduction has to be made from final demand. In table IX.3, this is shown as a decrease in the value of non-produced natural assets such as wild biota, subsoil assets and aquifers (-17.3) and a decrease in ecological functions of produced natural assets such as the destruction of habitats in cultivated forests (-0.9).

The above-mentioned physical resource accounting methodologies provide relatively straightforward tools for measuring depletion rates of natural resource stocks or reserves. However, placing monetary values on these stocks or changes in them is more controversial. Where natural resources are substitutable by other (marketed) materials or human or produced capital, the estimation of the replacement costs, that is the market value of procuring the substitute, is probably the best valuation procedure. Where such substitution possibilities do not exist, for instance in the case of "complementary" resources, valuation is more difficult, since the eventual exhaustion or irreversible degradation of these resources forecloses any options for future generations to produce the same output with the same production technology.

*A priori*, the application of the opportunity or user-cost concept for the calculation of the present-day value of future yields forgone seems to be a theoretically convincing approach. The assumption that individual present-day producers and consumers should be the evaluators of future benefits would require the assessment of their preferences, revealed by their willingness to sacrifice current consumption or production for the benefit of future generations. On the other hand, one might consider individual preferences as myopic about the future, that is, incapable of valuing the social concern of maintaining resources for future generations. In that case, normative (governmental) standards for delayed use or non-use of resources could be set. The costs of violating the standards by actual resource exploitation would then have to be estimated in terms of socially desirable development levels and patterns forgone. However, non-use of exhaustible resources (especially subsoil assets of mineral resources) is an economically unsound option for countries endowed with such resources. One way to account for such resources is to assume a broad sustainability concept which would allow for reinvesting a portion of the revenue generated by the use of the resources in alternative production processes.

### Accounting for environmentally sound production and consumption

Environmentally sound production and consumption patterns allow for the maintenance or improvement of environmental quality. Such an allowance could be made in environmental accounting by introducing environmental services as the provision of an additional amenity, supplied by nature in an extended production system. Such an extension can be achieved in principle by adding a "natural production account" to those of industry, households and government.[36] However, the present accounting framework attempts to circumvent the near-insurmountable problems of measurement and valuation of nature's production of services by focusing on actual and potential costs of environmental degradation within conventional economic production and consumption boundaries (as defined by SNA), but extending the concept of capital formation into a concept of capital "accumulation" of both economic and environmental assets.

In Table IX.3, environmental degradation caused by economic activities is shown as an environmental cost of the use of natural asset services, allocated to the different industries (42.3) and private households (16.4) responsible for waste discharge and pollution or other impairment of the quality of air, water and land. Further impacts result from the involuntary "importation" of residuals, for example, foreign waste dumping on national territories (1.6), and from the residuals of (scrapped) capital goods (5.1). Non-marketed governmental protection activities (5.0) are assumed to counteract non-allocated environmental degradation in the same amount (-5.0). Total environmental degradation is mirrored by a decrease in the value of non-produced natural assets (-55.7) and an "export" of residuals (-4.7). Deducting (in addition to the above-mentioned depletion costs) the degradation costs from gross value added gives, in principle, "environmentally sound and sustainable gross value added".

The impacts of natural and man-made disasters on natural or man-made assets are not caused, or at least not predominantly caused, by economic uses of natural assets. They are therefore not presented as an environmental cost of such uses, which would affect value added and income generation, but are included under "other volume changes" (outside the use/value added tabulations) in the tangible asset balance sheets. In table IX.3, these damages are reflected as a decrease in produced man-made assets (-25.3) and in non-produced natural assets (as a negative amount, compensated by natural growth and discoveries of subsoil assets, thus resulting in a total volume change of 22.8).

[35] "Sustainable" refers here only to an allowance for the consumption of natural resource capital, similar to the one made for the consumption of produced capital in "net" national product or income calculations (other factors affecting the sustainability of production, income generation and economic growth are discussed below).

[36] As suggested by H. M. Peskin, "A proposed environmental accounts framework", in Y. J. Ahmad, S. El Serafy and E. Lutz, eds., *Environmental Accounting for Sustainable Development* (Washington, D. C., World Bank, 1989), pp. 65-78.

It is suggested that the net value of environmental degradation (allowing for partial abatement of environmental deterioration during the accounting period) be assessed by estimating potential abatement costs. These are the costs required either to achieve the level of environmental quality at the beginning of the accounting period or a level specified by "official" environmental standards. Such standards are assumed to reflect a technological solution for abating environmental degradation that can "reasonably" be expected to be applied by the different polluters. If such standards or technological solutions are not available, the hypothetical costs of avoiding (actually occurred) degradation could be estimated.

### Environmentally adjusted product and income

The incorporation of environmental costs in production, consumption and in changes of man-made and natural assets permits the calculation of environmentally modified value added and, if aggregated for the economy, of environmentally adjusted domestic product and national income.

In table IX.3, GDP can be calculated as the difference between total domestic supply of goods and services (S) and intermediate consumption of goods and services (IC):

$$GDP = S - IC = 517.4 - 224.0 = 293.4$$

Deducting fixed capital consumption (CC) and environmental depletion costs ($EC_d$) from GDP obtains a modified aggregate of net domestic product, adjusted for natural resource depletion (NDP*):

$$NDP^* = GDP - CC - EC_d = 293.4 - 26.3 - 17.5 = 249.6$$

Further deducting the costs of environmental quality degradation ($EC_q$) by industries (42.3), and households (17.1) and from capital goods (5.1)[37] obtains the main proposed aggregate of "environmentally adjusted net domestic product"

$$EDP = GDP - CC - EC_d - EC_q$$
$$= 293.4 - 26.3 - 17.5 - 64.5 = 185.1$$

Further modification of EDP for net transfers of income to domestic production from abroad and for environmental damages and benefits (e.g., by allowing for "defensive" expenditures of environmental protection, pollution-related health care and recreation and so forth) would obtain "environmentally adjusted Nntional income" (ENI). This aggregate is more closely related to welfare analysis, in the sense of "claims" by households over truly welfare- creating goods and services, especially after further redistribution of national income for the calculation of "disposable income".

The deduction of environmental costs from conventional macro-indicators does not mean that these costs are actually internalized at the micro-economic level by individual economic agents. These costs are imputations which do not affect supply and demand patterns and corresponding price formation during the accounting period. The deduction of such imputed values generates aggregates whose valuation has not gone through the mill of price formation in the market and which are therefore not strictly comparable to the value of market transactions presented in national accounts. The function of indicators, modified by such imputations, might thus be more to identify structural distortions of the economy and unsustainable trends in its growth than to provide an accurate picture of past economic activity.

Using the largely fictive figures of table IX.3, table IX.4 compares selected indicators and ratios obtained from conventional accounts (column 1) with the corresponding ones from the present framework (column 2). As expected, EDP is lower than NDP by about 30 per cent. This difference is due to changes in the concepts of final consumption and capital formation. Some of the change is due to the shift of non-marketed environmental restoration by government from governmental final consumption (5.0) to natural capital accumulation (negative environmental degradation of -5.0). Most of the change in domestic however, results from recording environmental costs as changes in capital accumulation (-77.0, including the net value of cross-border transport of residuals), presenting a total "disinvestment" of -23.5. These changes are also reflected in the shares of final consumption and capital formation/accumulation in net domestic product. The increase of the share of final consumption from 81 per cent to 115 per cent illustrates dramatically a non-sustainable consumption style of living off the natural capital base.

Table IX.4. Comparative analysis of conventional and environmental accounting: selected indicators

| | NDP-based calculation (1) | EDP-based calculation (2) |
|---|---|---|
| Domestic product | 267.1 | 185.1 |
| Final consumption | 217.5 | 212.5 |
| Final consumption/ domestic product (percentage) | 81 | 115 |
| Net capital formation | 50.4 | -23.5 |
| Net capital formation (accumulation)/ domestic product (percentage) | 19 | -13 |
| Value added/capital (percentage) | 25 | 7 |

The above effects describe changes in the composition of income generated and the level and pattern of expenditure for final consumption and investment. These indicators figure prominently in macroeconomic analyses of income, consumption, saving, growth and welfare. More cost-oriented analyses, especially in a breakdown by economic sector, would examine changes in productivity, due to the inclusion of environmental

[37] Environmental costs incurred by households and from scrapped capital goods are shifted from final demand via an "environmental adjustment row".

and natural resource costs. Changes in environmental assets, in a broader concept of capital accumulation, affect the productivity of "capital" (including natural capital) in production. In table IX.4, the overall value-added/capital ratio (based on the opening stocks of assets in table IX.3) decreases from 25 per cent to 7 per cent, with marked variations among different industries in the original detailed calculations. This would present a quite different picture of national and sectoral capital efficiencies. Investment policies of government and industry could thus be significantly affected by these new accounting approaches, if such accounting becomes accepted practice at macroeconomic and microeconomic levels.

## C. SELECTED DEMOGRAPHIC INDICATORS

Research continues to draw attention to the important interactions that exist between demographic and socio-economic factors. Linkages between population and development emerge fairly sharply in relation to labour force, employment and related human resource and environmental concerns. The present section gives a brief overview of demographic trends - changes in population structure and trends in mortality and urbanization. The sources of information are recent publications of the Population Division of the Department of International Economic and Social Affairs of the United Nations Secretariat.

### Population structure

The youthful age structures accompanying rapid population growth mean that a large proportion of the population is supported by those in the economically productive age groups. According to the 1990 revision of the official United Nations population estimates, the world population under the age of 15 is estimated to be 1,710 million. Of these children, 17 out of 20 live in the developing regions.

Some 36 per cent of the people living in developing countries are under 15 years of age. Their fertility as adults will make an enormous difference to population growth rates and consequently to global resources. There are marked geographical differences in the current age distribution, as shown in table IX.5, reflecting past levels and trends of fertility and mortality. The youngest population is found in Africa. In this region, the proportion under the age of 15 is about 45 per cent and the proportion aged 65 and over is 3 per cent. Therefore nearly half the population is in the dependency ranges of 0-14 or 65 and over.

Table IX.5. Percentage of population in age groups 0-14, 15-64 and 65 and over, by major area and region, 1980 and 1990

| | 1980 | | | | 1990 | | | |
|---|---|---|---|---|---|---|---|---|
| Major area and region | Total | 0-14 | 15-64 | 65+ | Total | 0-14 | 15-64 | 65+ |
| World | 100.0 | 35.2 | 58.9 | 5.9 | 100.0 | 32.3 | 61.5 | 6.2 |
| Developed countries | 100.0 | 23.1 | 65.4 | 11.5 | 100.0 | 21.4 | 66.5 | 12.1 |
| Developing countries | 100.0 | 39.4 | 56.6 | 4.0 | 100.0 | 35.6 | 59.9 | 4.5 |
| Africa | 100.0 | 44.8 | 52.2 | 3.0 | 100.0 | 45.0 | 52.0 | 3.0 |
| Asia | 100.0 | 37.6 | 58.0 | 4.4 | 100.0 | 32.9 | 62.1 | 5.0 |
| Latin America | 100.0 | 39.3 | 56.3 | 4.4 | 100.0 | 35.8 | 59.4 | 4.8 |
| Northern America | 100.0 | 22.5 | 66.4 | 11.1 | 100.0 | 21.4 | 66.1 | 12.5 |
| Europe | 100.0 | 22.3 | 64.6 | 13.1 | 100.0 | 19.5 | 67.1 | 13.4 |
| Oceania | 100.0 | 29.3 | 62.7 | 8.0 | 100.0 | 26.6 | 64.4 | 9.0 |
| USSR | 100.0 | 24.7 | 65.0 | 10.3 | 100.0 | 25.5 | 64.9 | 9.6 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4), table 46.

An additional concern is the growing proportion of elderly people in the developed countries, where the proportion aged 65 and over is already about 12 per cent. In the developing countries, the elderly account for 4.5 per cent of the total population. The age distributions in Latin America and Asia fall between the young age distribution in Africa and the relatively old age distributions in North America, Europe, Oceania and Union of Soviet Socialist Republic. In these two major areas, about 5 per cent of the population is aged 65 and over and about one third is under the age of 15.

The main concern of the developing countries is that the proportion under the age of 15 is too high and demographic aging is a phenomenon often disregarded in the list of difficulties facing the developing world. However, it might become one of the major economic and social problems, as a significant demographic change takes place in countries that are barely prepared to cope with it. Continuing reductions in mortality and fertility are raising the proportion of the elderly in all regions of the world; the rate of growth among them is higher than it is for the total population.

In general, children and the elderly are the dependent members of a population, people between the ages of 15 and 64 providing the main productive force. For the world as a whole, the number of people in the dependent ages relative to those in the productive ages has declined in the past decade (see table IX.6), mainly as a result of the widespread fall in fertility, moderately offset by the progressive improvements in mortality. The burden of dependency is still about 33 per cent higher in the developing countries than it is in the developed countries, reflecting the higher fertility in the former group. Africa has the highest dependency ratio in the world. In 1990, there were about 93 persons in the dependent years for each 100 in the working years. The dependency ratios for Asia and Latin America in 1990 were 69 and 61, respectively. The high dependency ratio in the developing countries, particularly in countries with limited natural resources, is not favourable to social and economic development.

Table IX.6. Demographic dependency ratios, total and specific for ages under 15 and 65 and over, by major area and region, 1980 and 1990

(Percentage)

| Major area and region | 1980 | | | 1990 | | |
|---|---|---|---|---|---|---|
| | Total | Under age 15 | Age 65+ | Total | Under age 15 | Age 65+ |
| World | 69.9 | 59.8 | 10.1 | 62.6 | 52.6 | 10.1 |
| Developed countries | 53.0 | 35.4 | 17.6 | 50.1 | 32.0 | 18.1 |
| Developing countries | 76.6 | 69.5 | 7.1 | 66.7 | 59.3 | 7.4 |
| Africa | 91.6 | 85.8 | 5.8 | 92.5 | 86.7 | 5.8 |
| Asia | 72.5 | 64.9 | 7.6 | 61.0 | 52.9 | 8.0 |
| Latin America | 77.5 | 69.7 | 7.7 | 68.5 | 60.4 | 8.1 |
| Northern America | 50.8 | 34.0 | 16.8 | 51.2 | 32.4 | 18.8 |
| Europe | 54.9 | 34.6 | 20.3 | 49.2 | 29.2 | 20.0 |
| Oceania | 59.5 | 46.8 | 12.8 | 55.1 | 41.1 | 14.0 |
| USSR | 53.9 | 38.1 | 15.8 | 54.0 | 39.2 | 14.8 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4), table 46.

## Mortality

The expected length of life at birth, a summary measure that reflects overall health and mortality conditions, increased for the world as a whole from 62.1 years in 1980-1985 to 63.9 years in 1985-1990 (see table IX.7). The estimated global infant mortality rate has decreased from 79 to 70 deaths per 1,000 live births for the same period.

Table IX.7. Life expectancy at birth and infant mortality rate, by major area and region, 1980-1985 and 1985-1990

| Major area and region | Life expectancy at birth (years) | | Infant mortality rate (per 1,000 live births) | |
|---|---|---|---|---|
| | 1980-1985 | 1985-1990 | 1980-1985 | 1985-1990 |
| World | 62.1 | 63.9 | 79 | 70 |
| Developed countries | 72.8 | 74.0 | 16 | 15 |
| Developing countries | 59.4 | 61.4 | 89 | 78 |
| Africa | 49.6 | 52.0 | 116 | 103 |
| Asia | 60.5 | 62.7 | 83 | 72 |
| Latin America | 65.2 | 66.7 | 61 | 54 |
| Northern America | 74.7 | 75.6 | 11 | 10 |
| Europe | 73.5 | 74.4 | 15 | 13 |
| Oceania | 70.1 | 71.3 | 30 | 26 |
| USSR | 67.9 | 70.0 | 26 | 24 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4), tables 45 and 46.

There are still large differences at the regional and subregional levels. For the developing countries as a whole, life expectancy at birth for both sexes was 61.4 years for the period 1985-1990. The gain in expected years of life over the preceding decade was two years. The infant mortality rate for 1985-1990 was estimated to be 78 per 1,000 live births, a reduction from the level of 89 of 10 years earlier. During the same period, the developed countries, which had the much higher life expectancy of 72.8 years a decade ago, scored a further 1.6 per cent improvement, reaching an estimated expectation of life of 74 years.

Mortality conditions in Africa are the worst in the developing world. Life expectancy at birth lags about 10 years behind the 1985 target of 62 years called for in the World Population Plan of Action.[38] Life expectancy at birth for the whole continent in 1985-1990 was 52 years for both sexes, over nine years shorter than in the developing regions as a whole. Yet, the infant mortality rate has improved in Africa during the past decade, from 116 to 103 per 1,000 live births for the period 1980-1985 to 1985-1990. Mortality conditions are considerably better in Asia, which had reached a life expectancy of 62.7 years in 1985-1990 for both sexes. Conditions were even bet-

[38] *Report of the United Nations World Population Conference, 1974, Bucharest, 19-30 August 1974* (United Nations publication, Sales No. E.75.XIII.3), chap. I, para. 22.

ter in Latin America, where life expectancy reached 66.7 for that period. The infant mortality rates for Asia and Latin America in 1985-1990 were 72 and 54 per 1,000 live births, respectively. The improvement of maternal and child welfare services, vaccinations, continuous supervision of pregnancies and the improvement in the educational level of women have all helped to reduce infant mortality.

However, despite improvements in infant mortality rates, at present approximately 14 million children under five are dying each year in the developing world - more than a quarter of a million each week.[39] The immediate causes of more than 60 per cent of those deaths are preventable diseases such as diarrhoea, measles, tetanus, whooping cough and pneumonia. One of the goals adopted by the World Summit for Children in 1990 is a one-third reduction in under-five death rates (or a reduction to below 70 deaths per 1,000 births, whichever is less) by the year 2000.[40]

Maternal mortality in the developing countries has recently received more global and national attention due to the scope and significance of the problem. Complications of pregnancy and childbirth are one of the leading causes of death among women of the reproductive ages. The levels of maternal mortality in the developed and developing countries show a greater disparity than any other health indicator. According to estimates of the World Health Organization (WHO), 500,000 women die each year from causes related to pregnancy and childbirth and 99 per cent of them live in developing countries.

Table IX.8 shows maternal deaths per 100,000 women of reproductive age annually, which indicates that in the developed countries 2 per 100,000 women in the reproductive age die yearly of maternity-related causes, while 30 times that number of women die in the developing world. Maternal mortality rates are highest in Africa, where they are estimated at 640 per 100,000 live births. The wide disparity between developed and developing countries is due partly to health care and sanitation factors and partly to the much higher fertility levels prevailing in the developing countries.

Table IX.8. Maternal mortality rates, by major area and region, 1983

| Major area and region | Maternal mortality (per 100,000 live births) | (per 100,000 women, aged 15-49) |
|---|---|---|
| World | 390 | 45 |
| Developed countries | 30 | 2 |
| Developing countries | 450 | 60 |
| Africa | 640 | 129 |
| Asia | 420 | 49 |
| Latin America | 270 | 34 |

Source: World Population Monitoring, 1991 (United Nations publication, forthcoming), table 56.

## Urbanization

Urban growth has two sources: rural-urban migration and natural increase of the urban population. Although high birth rates make the latter source an important factor in city growth in the developing countries, rural-urban migration plays an even more important role there than it does in the developed countries.

The urban population of the world was estimated to be 2.4 billion in 1990. It is estimated that nearly 50 million people are added to the world's urban population and about 35 million to the rural population each year.[41] The share of the world's population living in urban areas has increased from 40 per cent in 1980 to 45 per cent 1990 (see table IX.9).

There is a large gap in the level of urbanization between developed and developing regions and within regions. In 1990, about 73 per cent of the population of the developed countries lived in urban areas. The corresponding figure for the developing countries was 37 per cent.

One of the key indicators of the intensity of the redistribution of population from rural to urban areas is the rate of urbanization, which is the average annual rate of increase in the percentage of population living in urban areas. Table IX.10 shows the rate of urbanization in different regions of the world. The global urban population is growing at 3.1 per cent, almost twice the rate of growth of the total population and nearly five times the rate of growth of the rural population.

Table IX.9. Percentage of population residing in urban areas, by major area and region, 1980, 1985 and 1990

| Major area and region | 1980 | 1985 | 1990 |
|---|---|---|---|
| World | 39.5 | 42.2 | 45.2 |
| Developed countries | 70.3 | 71.6 | 72.6 |
| Developing countries | 28.9 | 32.8 | 37.1 |
| Africa | 27.8 | 30.6 | 33.9 |
| Asia | 26.3 | 30.1 | 34.4 |
| Latin America | 65.0 | 68.5 | 71.5 |
| Northern America | 73.9 | 74.6 | 75.2 |
| Europe | 70.4 | 71.9 | 73.4 |
| Oceania | 71.2 | 70.7 | 70.6 |
| USSR | 63.0 | 65.2 | 65.8 |

Source: World Urbanization Prospects, 1990 (United Nations publication, forthcoming), table A.1.

The rate of urbanization in developed countries has largely stabilized at a low level. In the developing countries, Latin

[39] UNICEF, *The State of the World's Children 1991* (Oxford and New York, Oxford University Press, 1991), p. 5.

[40] Ibid., p. 72.

[41] *Concise Report on the World Population Situation in 1989* (United Nations publication, Sales No. E.90.XIII.32), para. 85.

Table IX.10. Rate of growth of total, urban and rural populations, by major area and region, 1980-1985 and 1985-1990

(Percentage)

| Major area and region | Total population | | Urban population | | Rural population | |
|---|---|---|---|---|---|---|
| | 1980-1985 | 1985-1990 | 1980-1985 | 1985-1990 | 1980-1985 | 1985-1990 |
| World | 1.74 | 1.74 | 3.06 | 3.09 | 0.82 | 0.69 |
| Developed countries | 0.66 | 0.54 | 1.02 | 0.81 | -0.24 | -0.15 |
| Developing countries | 2.09 | 2.11 | 4.62 | 4.53 | 0.97 | 0 .81 |
| Africa | 2.94 | 2.99 | 4.89 | 5.01 | 2.14 | 2.03 |
| Asia | 1.86 | 1.87 | 4.58 | 4.54 | 0.79 | 0.60 |
| Latin America | 2.17 | 2.06 | 3.22 | 2.93 | 0.06 | 0.02 |
| Northern America | 1.00 | 0.82 | 1.17 | 0.99 | 0.51 | 0.32 |
| Europe | 0.32 | 0.25 | 0.72 | 0.68 | -0.67 | -0.89 |
| Oceania | 1.51 | 1.48 | 1.38 | 1.46 | 1.84 | 1.54 |
| USSR | 0.88 | 0.78 | 1.57 | 0.98 | -0.34 | 0.41 |

*Source: World Urbanization Prospects, 1990 (United Nations publication, forthcoming), tables A.5, A.6 and A.7.*

America shows a level of urbanization that is within the range of the developed countries. In 1985-1990, the urban population in Africa and Asia grew at a rate of over 5 per cent and 4.5 per cent, respectively. That notwithstanding, the rural populations in Africa and Asia continue to grow.

There are complex population movements linking rural areas, towns and cities of the developing countries. Migration to cities can be encouraged by high population densities in rural areas, shortage of cultivable land, declining soil fertility, increasing commercialization of agriculture and agricultural land markets as well as government support for cash crops. In addition, the livelihood of rural-based artisans has frequently been changed, in the course of economic development, by increasing availability of mass-produced goods made or distributed by city-based enterprises. Factors such as these, but particularly the attraction of urban life combined with the concentration of public and private productive investment in relatively few urban centres, have meant rapid net in-migration for most cities in the developing world, at least for certain periods of their physical and demographic growth.

# Annex

## STATISTICAL TABLES

The statistical annex has been revised and expanded. It provides systematic and comprehensive coverage of data related to the topics discussed in the *Survey* and contains selected statistics on various aspects of global output, international trade and finance.

Despite the limitations of statistical availability, an effort has been made to provide timely information with uniform time series and country coverage incorporating Secretariat estimates and forecasts.

### List of tables

#### I. Global output and macroeconomic indicators



#### II. International trade

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## III. International finance and financial markets



## IV. The international oil market

# I. GLOBAL OUTPUT AND MACROECONOMIC INDICATORS

Table A.1. World population, output and per capita GDP, 1971-1990

| | Population (millions) | | Growth rate of population (annual percentage change) | | GDP (billions of 1980 dollars) | | GDP per capita (1980 dollars) | | Growth of real GDP per capita (annual percentage change) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1990 | 1971-1980 | 1981-1990 | 1980 | 1990 | 1980 | 1990 | 1971-1980 | 1981-1990 |
| Developed market economies | 768 | 816 | 0.9 | 0.6 | 7 844 | 10 351 | 10 209 | 12 682 | 2.4 | 2.2 |
| North America | 252 | 275 | 1.1 | 0.9 | 2 952 | 3 917 | 11 721 | 14 233 | 2.2 | 2.0 |
| Western Europe | 349 | 355 | 0.5 | 0.2 | 3 541 | 4 448 | 10 143 | 12 520 | 2.4 | 2.1 |
| EC | 318 | 324 | 0.5 | 0.2 | 3 129 | 3 927 | 9 834 | 12 122 | 2.3 | 2.1 |
| Other | 31 | 31 | 0.3 | 0.1 | 413 | 521 | 13 310 | 16 631 | 2.9 | 2.3 |
| Developed Asia | 135 | 144 | 1.2 | 0.7 | 1 246 | 1 856 | 9 249 | 12 883 | 3.3 | 3.4 |
| Eastern Europe and the Soviet Union | 376 | 404 | 0.8 | 0.7 | - | - | - | - | 4.4 | 1.0 |
| Eastern Europe | 109 | 113 | 0.6 | 0.3 | - | - | - | - | 5.2 | 0.1 |
| Soviet Union | 267 | 291 | 0.9 | 0.9 | - | - | - | - | 4.1 | 1.4 |
| Developing countries | 3 163 | 3 903 | 2.3 | 2.1 | 2 310 | 3 204 | 730 | 821 | 3.2 | 1.2 |
| by region: | | | | | | | | | | |
| Latin America | 347 | 432 | 2.5 | 2.2 | 802 | 883 | 2 313 | 2 045 | 2.9 | -1.2 |
| Africa | 419 | 564 | 2.9 | 3.0 | 315 | 372 | 752 | 661 | 2.0 | -1.3 |
| West Asia | 89 | 126 | 3.4 | 3.5 | 383 | 355 | 4 287 | 2 812 | 2.8 | -4.1 |
| South and East Asia | 1 244 | 1 562 | 2.3 | 2.3 | 520 | 916 | 418 | 587 | 2.7 | 3.4 |
| Mediterranean | 67 | 80 | 1.8 | 1.7 | 124 | 157 | 1 834 | 1 950 | 3.4 | 0.6 |
| China | 996 | 1 139 | 1.8 | 1.4 | 289 | 678 | 291 | 595 | 4.0 | 7.4 |
| by analytical grouping: | | | | | | | | | | |
| Capital-surplus countries | 67 | 96 | 3.7 | 3.7 | 366 | 312 | 5 453 | 3 242 | 2.7 | -5.1 |
| Capital-importing countries | 3 095 | 3 807 | 2.2 | 2.1 | 1 943 | 2 892 | 628 | 760 | 3.0 | 1.9 |
| Four recent surplus economies | 63 | 71 | 1.9 | 1.2 | 142 | 297 | 2 244 | 4 157 | 3.3 | 6.4 |
| Other | 2 574 | 3 150 | 2.1 | 2.0 | 1 229 | 1 879 | 477 | 597 | 2.7 | 2.3 |
| Memo item: | | | | | | | | | | |
| Sub-Saharan Africa | 249 | 340 | 2.9 | 3.1 | 109 | 129 | 436 | 380 | -0.5 | -1.4 |
| Fifteen heavily indebted countries | 479 | 612 | 2.5 | 2.5 | 961 | 1 048 | 2 007 | 1 713 | 3.1 | -1.6 |

*Source*: UN/DIESA.

Table A.2. Developed market economies: rates of growth of real GDP, 1981-1991
(Annual percentage change[a])

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] | 1991[c] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| All developed market economies | 1.5 | -0.3 | 2.6 | 4.5 | 3.0 | 3.0 | 3.3 | 4.3 | 3.3 | 2.4◆ | 1.4 |
| Major industrial countries | 1.7 | -0.4 | 2.8 | 4.7 | 3.4 | 2.8 | 3.4 | 4.5 | 3.2 | 2.5◆ | 1.4 |
| Canada | 3.7 | -3.2 | 3.2 | 6.3 | 4.6 | 3.2 | 4.0 | 4.5 | 2.9 | 0.9 | 0.1 |
| France | 1.2 | 2.6 | 0.7 | 1.3 | 1.9 | 2.5 | 2.2 | 3.8 | 3.6 | 2.4 | 2.1 |
| Germany[d] | — | -1.0 | 1.9 | 3.3 | 1.9 | 2.3 | 1.6 | 3.7 | 3.9 | 4.6◆ | 0.9 |
| Italy | 1.0 | 0.3 | 1.1 | 3.0 | 2.6 | 2.6 | 3.0 | 4.2 | 3.2 | 2.2 | 1.3 |
| Japan[d] | 3.7 | 3.1 | 3.2 | 5.1 | 4.7 | 2.7 | 4.6 | 5.8 | 4.7 | 5.6 | 3.4 |
| United Kingdom | -1.1 | 1.3 | 3.7 | 1.8 | 3.8 | 3.6 | 4.8 | 4.2 | 2.1 | 1.0 | -0.8 |
| United States[d] | 1.9 | -2.6 | 3.6 | 6.6 | 3.5 | 2.9 | 3.4 | 4.4 | 2.5 | 1.0 | 0.9 |
| Other industrial countries | 0.7 | 0.3 | 1.4 | 3.4 | 1.3 | 3.8 | 2.7 | 3.5 | 3.7 | 2.2 | 1.5 |
| Memo item: | | | | | | | | | | | |
| Western Europe | 0.2 | 0.7 | 1.8 | 2.5 | 2.6 | 2.6 | 2.6 | 3.8 | 3.4 | 2.7◆ | 1.2 |
| EC | 0.1 | 0.6 | 1.7 | 2.4 | 2.5 | 2.6 | 2.7 | 3.9 | 3.5 | 2.8◆ | 1.3 |
| Other | 0.6 | 0.8 | 2.2 | 3.1 | 3.2 | 2.5 | 2.4 | 3.4 | 3.0 | 2.0 | 0.7 |

*Source*: UN/DIESA, based on IMF, *International Financial Statistics*.

◆ Indicates discontinuity in the series: from 1991, Germany includes eastern *Länder*.

[a] Data for country groups are weighted averages, where weights for each year are the previous year's GDP valued at 1980 prices and exchange rates.

[b] Partly estimated.

[c] Forecast, based in part on Project LINK.

[d] Real gross national product.

Table A.3. Eastern Europe and the Soviet Union: rates of growth of NMP, 1980-1990
(Annual percentage change)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastern Europe and the Soviet Union | 2.8 | 1.6 | 2.8 | 4.2 | 3.5 | 1.8 | 2.7 | 1.8 | 3.7 | 1.4◆ | -5.9 |
| Soviet Union | 3.9 | 3.3 | 3.9 | 4.2 | 2.9 | 1.6 | 2.3 | 1.6 | 4.4 | 2.4 | -4.0 |
| Eastern Europe | 0.3 | -2.3 | 0.3 | 4.3 | 5.1 | 2.3 | 3.7 | 2.4 | 2.1 | -1.0◆ | -10.6 |
| Bulgaria | 5.7 | 5.0 | 4.2 | 3.0 | 4.6 | 1.8 | 5.3 | 5.0 | 2.4 | -0.4 | -13.6 |
| Czechoslovakia | 2.9 | -0.1 | 0.2 | 2.3 | 3.5 | 3.0 | 2.6 | 2.1 | 2.3 | 1.0 | -3.0 |
| German Democratic Republic[a] | 4.4 | 4.8 | 2.6 | 4.6 | 5.5 | 5.2 | 4.3 | 3.3 | 2.8 | 2.1◆ | -13.4 |
| Hungary | -0.9 | 2.5 | 2.7 | 0.3 | 2.5 | -1.4 | 0.9 | 4.1 | -0.5 | -1.1 | -5.5 |
| Poland | -6.0 | -12.0 | -5.5 | 6.0 | 5.6 | 3.4 | 4.9 | 1.9 | 4.9 | -0.2 | -13.0 |
| Romania | 4.2 | -0.4 | 4.0 | 6.0 | 6.5 | -1.1 | 3.0 | 0.7 | -2.0 | -7.9 | -10.5 |

*Source*: UN/DIESA and ECE, based on national and international sources.

[u] Indicates discontinuity in the series.

[a] GDP for 1990 (estimates provided to ECE by the Deutsches Institut für Wirtschaftsforschung, Berlin).

Table A.4. Developing countries: rates of growth of real GDP, by country group, 1981-1991[a]
(Annual percentage change)

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] | 1991[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| All developing countries | 1.0 | 2.5 | 1.5 | 4.3 | 3.9 | 4.0 | 4.2 | 5.0 | 3.4 | 2.9 | 3.5 |
| by region: | | | | | | | | | | | |
| Latin America | -0.2 | -1.7 | -2.3 | 3.2 | 2.8 | 3.8 | 3.0 | 0.8 | 1.1 | -0.7 | 1.5 |
| Africa | -1.0 | 2.6 | 0.1 | - - | 5.0 | 1.7 | -0.1 | 2.1 | 3.3 | 3.4 | 3.0 |
| West Asia | -4.9 | 4.7 | -2.8 | -0.8 | -3.8 | -1.3 | -1.8 | 1.1 | 2.4 | - - | -0.5 |
| South and East Asia | 6.8 | 3.5 | 5.6 | 5.1 | 3.2 | 5.5 | 6.4 | 8.8 | 6.0 | 6.2 | 5.5 |
| Mediterranean | 2.7 | 2.6 | 1.0 | 3.8 | 2.9 | 5.6 | 3.7 | 1.4 | 1.0 | -0.7 | 2.0 |
| China[c] | 4.6 | 8.8 | 10.2 | 14.5 | 13.0 | 8.3 | 10.6 | 11.3 | 3.3 | 4.8 | 5.5 |
| by analytical grouping: | | | | | | | | | | | |
| Capital-surplus countries | -7.8 | 4.5 | -3.1 | -2.0 | -5.0 | -2.6 | -2.2 | 0.3 | 2.4 | - - | -1.0 |
| Capital-importing countries | 0.5 | 1.5 | 0.1 | 2.5 | 2.1 | 3.1 | 2.7 | 3.5 | 3.2 | 2.3 | 3.0 |
| Net energy exporters | 0.1 | 2.6 | -1.8 | 0.8 | 0.5 | -0.4 | - - | 2.1 | 2.6 | 2.7 | 3.0 |
| Net energy importers | 0.8 | 0.5 | 1.8 | 3.9 | 3.4 | 6.0 | 4.8 | 4.5 | 3.6 | 2.0 | 3.0 |
| Four recent surplus economies | 7.7 | 4.2 | 8.2 | 8.7 | 3.5 | 10.6 | 11.8 | 9.6 | 6.0 | 6.5 | 6.0 |
| Other | -0.3 | -0.2 | 0.7 | 3.0 | 3.4 | 5.1 | 3.4 | 3.3 | 3.0 | 0.8 | 2.0 |
| Memo item: | | | | | | | | | | | |
| Sub-Saharan Africa | 2.0 | 1.3 | -0.7 | 1.5 | 2.2 | 2.6 | 1.1 | 3.0 | 2.7 | 1.9 | 3.0 |
| Fifteen heavily indebted countries | -0.3 | -1.0 | -2.6 | 1.9 | 2.9 | 3.8 | 2.2 | 1.2 | 1.5 | -0.8 | 1.5 |

*Source*: UN/DIESA.

[a] Preliminary estimates.

[b] Forecast, based on Project LINK and Secretariat estimates. For the groups of developing countries, estimates are rounded to the nearest half percentage point.

[c] Net material product; data for 1981-1989 are government estimates.

Table A.5. Developed market economies: investment, saving and net transfers, 1980-1989
(Percentage of GDP)

| | | Gross domestic investment | Gross domestic saving | | | Net financial transfer |
|---|---|---|---|---|---|---|
| | | | Total | Government saving | Private saving | |
| Total[a] | 1980 | 21.9 | 21.1 | 0.8 | 20.3 | 0.8 |
| | 1985 | 19.8 | 19.6 | -0.7 | 20.3 | 0.2 |
| | 1986 | 19.4 | 19.4 | -0.8 | 20.2 | 0.0 |
| | 1987 | 19.7 | 19.3 | 0.1 | 19.2 | 0.4 |
| | 1988 | 20.5 | 20.1 | 0.6 | 19.6 | 0.3 |
| | 1989 | 20.9 | 20.6 | 1.2 | 19.4 | 0.3 |
| Major industrial countries[a] | 1980 | 21.4 | 20.7 | 0.6 | 20.1 | 0.6 |
| | 1985 | 19.6 | 19.2 | -0.9 | 20.0 | 0.4 |
| | 1986 | 19.2 | 18.9 | -1.0 | 19.9 | 0.3 |
| | 1987 | 19.3 | 18.7 | -0.1 | 18.9 | 0.6 |
| | 1988 | 20.1 | 19.6 | 0.4 | 19.2 | 0.5 |
| | 1989 | 20.4 | 20.1 | 1.1 | 19.0 | 0.3 |
| Germany | 1980 | 23.6 | 23.0 | 2.5 | 20.5 | 0.6 |
| | 1985 | 18.9 | 22.6 | 2.7 | 19.9 | -3.6 |
| | 1986 | 19.4 | 24.7 | 2.4 | 22.2 | -5.2 |
| | 1987 | 19.8 | 24.9 | 1.8 | 23.1 | -5.1 |
| | 1988 | 20.7 | 25.8 | 1.4 | 24.5 | -5.2 |
| | 1989 | 21.9 | 27.7 | 3.8 | 23.9 | -5.7 |
| Japan | 1980 | 32.3 | 31.4 | 3.2 | 28.3 | 0.9 |
| | 1985 | 28.5 | 31.9 | 5.0 | 26.9 | -3.4 |
| | 1986 | 28.0 | 32.0 | 4.8 | 27.2 | -4.0 |
| | 1987 | 29.2 | 32.4 | 6.4 | 25.9 | -3.2 |
| | 1988 | 31.0 | 33.3 | 7.6 | 25.7 | -2.3 |
| | 1989 | 32.9 | 34.1 | 8.5 | 25.6 | -1.2 |
| United States | 1980 | 16.0 | 15.4 | -0.1 | 15.6 | 0.6 |
| | 1985 | 16.3 | 13.3 | -2.7 | 16.0 | 3.0 |
| | 1986 | 15.7 | 12.5 | -3.1 | 15.7 | 3.1 |
| | 1987 | 15.3 | 12.1 | -2.2 | 14.3 | 3.2 |
| | 1988 | 15.3 | 13.1 | -2.1 | 15.2 | 2.2 |
| | 1989 | 15.0 | 13.5 | -1.6 | 15.1 | 1.5 |

*Source*: UN/DIESA, based on data of IMF, OECD, the World Bank and national authorities.

[a] National currency data converted to dollars for aggregation using purchasing power parity exchange rates of OECD.

Table A.6. Developed market economies: unemployment rates, 1981-1991[a]
(Percentage of total labour force)

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] | 1991[c] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| All developed market economies | 6.4 | 7.9 | 8.4 | 7.8 | 7.7 | 7.6 | 7.2 | 6.6 | 6.1 | 6.0 | 6.6 |
| Major industrial countries | 6.2 | 7.7 | 8.1 | 7.3 | 7.2 | 7.1 | 6.7 | 6.1 | 5.7 | 5.6 | 6.2 |
| Canada | 7.5 | 10.9 | 11.8 | 11.2 | 10.4 | 9.5 | 8.8 | 7.7 | 7.5 | 8.1 | 10.1 |
| France | 7.4 | 8.1 | 8.3 | 9.7 | 10.2 | 10.4 | 10.5 | 10.0 | 9.4 | 8.9 | 8.7 |
| Germany | 4.2 | 5.9 | 7.7 | 7.1 | 7.2 | 6.4 | 6.2 | 6.2 | 5.6 | 5.1 | 5.2 |
| Italy | 7.8 | 8.4 | 8.8 | 9.4 | 9.6 | 10.5 | 10.9 | 11.0 | 10.9 | 9.9 | 10.6 |
| Japan | 2.2 | 2.4 | 2.6 | 2.7 | 2.6 | 2.8 | 2.8 | 2.5 | 2.3 | 2.1 | 2.1 |
| United Kingdom | 9.8 | 11.3 | 12.4 | 11.7 | 11.2 | 11.2 | 10.3 | 8.5 | 6.9 | 6.4 | 8.1 |
| United States | 7.5 | 9.5 | 9.5 | 7.4 | 7.1 | 6.9 | 6.1 | 5.4 | 5.2 | 5.5 | 6.4 |
| Small industrial countries | 7.3 | 8.6 | 9.6 | 10.2 | 10.3 | 9.9 | 9.6 | 9.1 | 8.2 | 8.0 | 8.2 |
| Memo item: European Community | 7.8 | 9.2 | 10.1 | 10.5 | 10.6 | 10.6 | 10.3 | 9.7 | 8.8 | 8.2 | 8.6 |

*Source*: UN/DIESA, based on data of OECD.

[a] For the 7 countries shown and 10 others, unemployment data are standardized by OECD for comparability among countries and over time, in conformity with the definitions of the International Labour Office (see OECD, *Standardized Unemployment Rates: Sources and Methods* (Paris, 1985); national definitions and estimates are used for other countries.

[b] Partly estimated.

[c] Forecast, based in part on Project LINK.

Table A.7. Developed market economies: consumer price inflation, 1981-1991[a]
(Annual percentage change)

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] | 1991[c] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| All developed market economies | 9.7 | 7.3 | 5.1 | 5.0 | 4.4 | 2.7 | 3.3 | 3.6 | 4.8 | 5.5 | 5.5 |
| Major industrial countries | 9.6 | 6.8 | 4.4 | 4.6 | 3.9 | 2.0 | 2.9 | 3.2 | 4.4 | 5.0 | 4.8 |
| Canada | 12.5 | 10.8 | 5.9 | 4.3 | 4.0 | 4.2 | 4.3 | 4.1 | 5.0 | 4.8 | 6.2 |
| France | 13.4 | 11.8 | 9.6 | 7.5 | 5.7 | 2.5 | 3.3 | 2.7 | 3.5 | 3.4 | 4.0 |
| Germany | 6.3 | 5.2 | 3.4 | 2.4 | 2.2 | -0.1 | 0.2 | 1.3 | 2.8 | 2.7 | 3.8 |
| Italy | 17.9 | 16.5 | 14.7 | 10.8 | 9.2 | 5.9 | 4.7 | 5.1 | 6.3 | 6.5 | 6.8 |
| Japan | 5.1 | 2.7 | 1.8 | 2.3 | 2.0 | 0.6 | 0.1 | 0.7 | 2.3 | 3.1 | 2.7 |
| United Kingdom | 11.9 | 8.6 | 4.5 | 5.0 | 6.0 | 3.4 | 4.2 | 4.9 | 7.8 | 9.5 | 6.2 |
| United States | 10.3 | 6.2 | 3.2 | 4.3 | 3.5 | 1.9 | 3.7 | 4.0 | 4.8 | 5.4 | 5.0 |
| Other industrial countries | 10.3 | 10.0 | 8.4 | 7.2 | 7.0 | 6.2 | 5.5 | 5.5 | 6.8 | 7.9 | 8.4 |

*Source*: UN/DIESA, based on IMF, *International Financial Statistics.*

[a] Data for country groups are weighted averages where weights for each year are consumption expenditure for the year valued at 1980 prices and exchange rates.

[b] Partly estimated.

[c] Forecast, based on Project LINK.

Table A.8. Major developed market economies: financial indicators, 1980-1990

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *Growth of real money*[a] (percentage change) | | | | | | |
| Canada | -1.0 | 8.2 | -3.4 | -5.6 | 2.8 | 2.3 | 5.4 | 3.7 | 5.7 | 8.1 | 1.6 |
| France | -1.9 | -0.8 | -0.7 | 1.2 | 1.1 | 1.0 | 2.3 | 3.7 | 2.4 | 1.3 | 4.6 |
| Germany | -0.2 | -0.3 | 2.4 | 2.4 | 3.5 | 5.3 | 3.3 | 3.9 | 4.1 | 2.4 | 2.1 |
| Italy | -6.1 | -8.3 | 2.1 | -2.3 | 0.7 | 2.0 | 1.9 | 2.4 | 3.1 | 5.1 | 3.9 |
| Japan | 2.9 | 7.3 | 5.6 | 6.1 | 5.6 | 7.2 | 7.5 | 11.5 | 9.2 | 10.0 | 4.2 |
| United Kingdom | -0.9 | 12.5 | 5.6 | 4.7 | 6.6 | 5.3 | 18.4 | 15.4 | 10.9 | 12.2 | 4.2 |
| United States | -1.9 | -4.5 | 2.2 | 12.0 | 4.9 | 6.6 | 6.2 | 0.9 | 2.6 | — | -1.4 |
| | | | | | *Short-term interest rates*[b] (percentage) | | | | | | |
| Canada | 13.3 | 18.1 | 14.4 | 9.6 | 10.9 | 9.6 | 9.3 | 8.0 | 9.4 | 12.0 | 13.0 |
| France | 11.9 | 15.3 | 14.9 | 12.5 | 11.7 | 9.9 | 7.7 | 8.0 | 7.5 | 9.1 | 9.9 |
| Germany | 9.1 | 11.3 | 8.7 | 5.4 | 5.5 | 5.2 | 4.6 | 3.7 | 4.0 | 6.6 | 7.7 |
| Italy | 15.9 | 19.7 | 19.4 | 17.9 | 15.4 | 13.7 | 11.4 | 10.7 | 11.1 | 12.6 | 12.4 |
| Japan | 10.9 | 7.4 | 6.9 | 6.4 | 6.1 | 6.5 | 4.8 | 3.5 | 3.6 | 4.9 | 7.2 |
| United Kingdom | 15.1 | 13.0 | 11.5 | 9.6 | 9.3 | 11.6 | 10.4 | 9.3 | 9.8 | 13.1 | 14.1 |
| United States | 13.4 | 16.4 | 12.3 | 9.1 | 10.2 | 8.1 | 6.8 | 6.7 | 7.6 | 9.2 | 8.1 |
| | | | | | *Long-term interest rates*[c] (percentage) | | | | | | |
| Canada | 12.5 | 15.2 | 14.3 | 11.8 | 12.8 | 11.0 | 9.5 | 10.0 | 10.2 | 9.9 | 10.9 |
| France | 13.0 | 15.8 | 15.7 | 13.6 | 12.5 | 10.9 | 8.6 | 9.4 | 9.1 | 8.8 | 10.0 |
| Germany | 8.5 | 10.4 | 9.0 | 7.9 | 7.8 | 6.9 | 5.9 | 5.8 | 6.1 | 7.1 | 8.9 |
| Italy | 16.1 | 20.6 | 20.9 | 18.0 | 15.0 | 13.0 | 10.5 | 9.7 | 10.2 | 10.7 | 11.5 |
| Japan | 9.2 | 8.7 | 8.1 | 7.4 | 6.8 | 6.3 | 4.9 | 4.2 | 4.3 | 5.1 | 7.4 |
| United Kingdom | 13.8 | 14.7 | 12.9 | 10.8 | 10.7 | 10.6 | 9.9 | 9.5 | 9.4 | 9.6 | 11.1 |
| United States | 11.5 | 13.9 | 13.0 | 11.1 | 12.5 | 10.6 | 7.7 | 8.4 | 8.9 | 8.5 | 8.6 |

*Source*: UN/DIESA, based on IMF, *International Financial Statistics.*

[a] Real money is defined here as broad money (denoted M2 and comprising currency outside banks and demand deposits plus time, savings and foreign currency deposits of resident sectors other than central Government) deflated by GDP deflators. Growth rates measure changes from year-end to year-end (1990 data are partly estimated).

[b] Money market rates (Treasury bill rate for Italy and the United Kingdom).

[c] Yield on long-term government bonds.

Table A.9. Major developed market economies: real effective exchange rates, 1980-1990 (1985=100)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *Nominal effective exchange rates: global*[a] | | | | | | |
| Canada | 106.0 | 106.0 | 106.3 | 108.4 | 104.3 | 100.0 | 93.1 | 92.6 | 97.7 | 103.1 | 102.8 |
| France | 121.2 | 115.2 | 106.5 | 100.3 | 98.1 | 100.0 | 103.9 | 102.9 | 101.1 | 100.1 | 105.0 |
| Germany | 91.5 | 88.8 | 93.4 | 98.4 | 98.2 | 100.0 | 110.0 | 115.1 | 114.8 | 114.0 | 119.7 |
| Italy | 128.9 | 118.1 | 110.6 | 108.5 | 104.4 | 100.0 | 102.8 | 99.7 | 97.2 | 98.2 | 99.7 |
| Japan | 80.9 | 89.1 | 83.8 | 92.1 | 96.5 | 100.0 | 132.0 | 141.9 | 153.8 | 143.9 | 133.4 |
| United Kingdom | 111.6 | 114.9 | 110.5 | 103.3 | 99.1 | 100.0 | 93.3 | 89.2 | 94.4 | 91.6 | 90.1 |
| United States | 74.9 | 80.2 | 88.0 | 92.2 | 97.3 | 100.0 | 84.5 | 72.8 | 67.5 | 69.2 | 67.0 |
| | | | | | *Real effective exchange rates: industrial country partners*[b] | | | | | | |
| Canada | 88.8 | 95.7 | 98.9 | 103.9 | 103.4 | 100.0 | 93.0 | 98.2 | 109.7 | 125.5 | 133.1 |
| France | 113.4 | 109.9 | 111.7 | 104.8 | 99.9 | 100.0 | 99.3 | 96.9 | 95.0 | 93.3 | 97.8 |
| Germany | 103.8 | 95.6 | 96.6 | 99.5 | 98.3 | 100.0 | 111.1 | 121.0 | 121.9 | 121.3 | 129.0 |
| Italy | 95.5 | 92.6 | 92.5 | 97.8 | 100.8 | 100.0 | 100.5 | 102.6 | 100.6 | 106.7 | 111.5 |
| Japan | 94.7 | 102.4 | 91.3 | 97.3 | 100.8 | 100.0 | 122.4 | 127.2 | 135.8 | 129.1 | 113.0 |
| United Kingdom | 115.3 | 121.8 | 114.4 | 105.5 | 101.1 | 100.0 | 94.0 | 93.5 | 99.2 | 97.6 | 98.3 |
| United States | 72.2 | 80.9 | 91.2 | 92.9 | 98.2 | 100.0 | 79.7 | 68.2 | 63.3 | 64.6 | 58.6 |

*Sources*: IMF, *International Financial Statistics*, and OECD, *Economic Outlook*.

a Weights based on manufactures trade with 23 OECD countries and 6 non-OECD areas (rebased from 1970 first quarter =100).

b Based on relative normalized unit labour costs in 16 industrial countries.

Table A.10. Eastern Europe and the Soviet Union: output and demand indicators, 1980-1990 (Annual percentage change)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industry, gross product** | | | | | | | | | | | |
| Bulgaria | 4.2 | 5.4 | 4.6 | 4.3 | 4.2 | 3.2 | 4.0 | 4.2 | 5.1 | 2.2 | -14.1 |
| Czechoslovakia | 3.5 | 2.1 | 1.1 | 2.8 | 3.9 | 3.5 | 3.2 | 2.5 | 2.1 | 0.8 | -3.7 |
| German Democratic Republic | 4.6 | 4.7 | 3.2 | 4.2 | 4.2 | 4.4 | 3.7 | 3.1 | 3.2 | 2.3 | -28.1 |
| Hungary | -1.7 | 2.4 | 2.5 | 1.2 | 3.2 | 0.7 | 1.9 | 3.5 | -0.3 | -2.5 | -5.0 |
| Poland | — | -10.8 | -2.1 | 6.4 | 5.2 | 4.5 | 4.7 | 3.4 | 5.3 | -0.5 | -23.3 |
| Romania | 6.6 | 2.8 | 1.0 | 4.7 | 6.7 | 3.9 | 7.3 | 2.4 | 3.1 | -2.1 | -19.8 |
| Eastern Europe | 3.1 | -0.5 | 1.1 | 4.4 | 4.9 | 3.9 | 4.5 | 3.1 | 3.5 | 0.1 | -19.0 |
| USSR | 3.6 | 3.4 | 2.9 | 4.2 | 4.1 | 3.4 | 4.4 | 3.8 | 3.9 | 1.7 | -1.2 |
| Eastern Europe and the USSR | 3.4 | 2.3 | 2.4 | 4.3 | 4.3 | 3.5 | 4.4 | 3.6 | 3.8 | 1.3 | -6.2 |
| **Agriculture, gross product** | | | | | | | | | | | |
| Bulgaria | 4.6 | 5.9 | 5.2 | 7.2 | 7.0 | -12.3 | 11.7 | -5.1 | 0.1 | 0.4 | -8.8 |
| Czechoslovakia | 4.8 | -2.5 | 4.4 | 4.2 | 4.4 | -1.6 | 0.6 | 0.9 | 2.9 | 1.8 | -3.7 |
| German Democratic Republic | 1.3 | 1.5 | -4.1 | 3.9 | 6.6 | 3.9 | — | -0.3 | -2.1 | 1.6 | -30.0 |
| Hungary | 4.6 | 2.0 | 7.3 | -2.7 | 2.9 | -5.5 | 2.4 | -2.0 | 4.3 | -1.3 | -7.0 |
| Poland | -10.6 | 3.8 | -2.8 | 3.3 | 5.7 | 0.7 | 5.0 | -2.3 | 1.2 | 1.5 | -1.4 |
| Romania | -5.0 | -0.4 | 6.9 | — | 13.3 | 0.7 | -5.5 | -8.9 | 5.7 | -5.1 | -3.0 |
| Eastern Europe | -3.7 | 1.9 | 1.5 | 1.2 | 6.8 | -0.9 | 1.8 | -2.9 | 1.9 | — | -7.9 |
| USSR | -1.9 | -1.0 | 5.5 | 6.2 | -0.1 | 0.1 | 5.3 | -0.6 | 1.7 | 0.8 | -2.3 |
| Eastern Europe and the USSR | -2.5 | -0.1 | 4.1 | 4.5 | 2.1 | -0.2 | 4.1 | -1.4 | 1.8 | 0.5 | -4.1 |
| **Gross investment** | | | | | | | | | | | |
| Bulgaria | 7.5 | 10.5 | 3.6 | 0.7 | 0.3 | 8.6 | 8.0 | 7.2 | 2.4 | -7.7 | -13.5 |
| Czechoslovakia | 1.4 | -4.6 | -2.3 | 0.6 | -4.2 | 5.4 | 1.4 | 4.4 | 4.1 | 1.6 | 3.0 |
| German Democratic Republic | 0.1 | 2.4 | -5.1 | -0.3 | -4.9 | 3.4 | 5.3 | 8.0 | 7.3 | 0.9 | -5.7 |
| Hungary | -5.5 | -4.7 | -1.6 | -3.4 | -3.7 | -3.0 | 6.5 | 9.8 | -9.1 | 0.5 | -9.0 |
| Poland | -12.3 | -22.3 | -12.1 | 9.4 | 11.4 | 6.0 | 5.1 | 4.2 | 5.4 | -2.4 | -8.0 |
| Romania | 3.0 | -7.1 | -3.1 | 2.4 | 6.0 | 1.6 | 1.1 | -1.4 | -2.2 | -1.6 | -35.0 |
| Eastern Europe | -2.2 | -7.2 | 4.4 | 2.3 | 2.2 | 3.9 | 3.9 | 4.1 | 2.1 | -1.5 | -14.0 |
| USSR | 2.2 | 3.7 | 3.5 | 5.6 | 1.9 | 3.0 | 8.3 | 5.7 | 6.2 | 4.7 | -4.3 |
| Eastern Europe and the USSR | 0.8 | 0.3 | 1.2 | 4.7 | 2.0 | 3.2 | 7.1 | 5.2 | 5.2 | 3.1 | -6.7 |

Table A.10. *(continued)*

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Export volume** | | | | | | | | | | | |
| Bulgaria | 12.2 | 8.3 | 11.4 | 4.5 | 4.7 | 7.4 | -3.7 | 1.8 | 2.4 | -3.4 | -26.0 |
| Czechoslovakia | 4.9 | 0.3 | 6.1 | 5.7 | 9.5 | 2.6 | 1.2 | 3.4 | 3.2 | -2.0 | -13.0 |
| German Democratic Republic | 3.7 | 9.8 | 6.2 | 12.0 | 2.3 | 2.3 | -4.5 | -0.1 | -0.2 | 0.5 | — |
| Hungary | 1.0 | 2.6 | 7.3 | 9.4 | 5.8 | -0.3 | -2.2 | 4.0 | 5.1 | — | -4.3 |
| Poland | 4.2 | -19.0 | 8.7 | 10.3 | 9.5 | 1.3 | 4.9 | 4.8 | 9.1 | 0.2 | 14.9 |
| Romania | 1.2 | 11.3 | -8.3 | 3.2 | 15.9 | 0.3 | 0.2 | -4.3 | 7.4 | -10.8 | -46.0 |
| Eastern Europe | 3.1 | 2.7 | 5.3 | 8.0 | 7.0 | 2.5 | -1.2 | 1.4 | 3.7 | -2.1 | -9.8 |
| USSR | 1.6 | 1.9 | 4.5 | 3.3 | 2.5 | 4.3 | 10.0 | 3.3 | 4.8 | — | -12.9 |
| Eastern Europe and the USSR | 2.3 | 2.3 | 4.9 | 5.8 | 4.9 | -0.7 | 3.8 | 2.1 | 4.2 | -1.0 | -11.4 |
| **Import volume** | | | | | | | | | | | |
| Bulgaria | 4.1 | 9.3 | 3.1 | 5.2 | 2.2 | 10.5 | 3.9 | -1.4 | 5.3 | -6.5 | -20.0 |
| Czechoslovakia | 1.6 | -6.9 | 2.9 | 2.1 | 0.3 | 4.6 | 2.7 | 4.3 | 2.9 | 2.7 | — |
| German Democratic Republic | 5.0 | -1.7 | -6.2 | 7.2 | 4.8 | 4.1 | 2.9 | 9.0 | 4.7 | 2.4 | 15.0 |
| Hungary | 1.1 | 0.1 | 0.1 | 3.9 | 0.1 | 1.1 | 2.1 | 3.3 | -2.0 | 1.0 | -3.4 |
| Poland | -1.9 | -16.9 | 13.7 | 5.2 | 8.6 | 7.9 | 4.9 | 4.5 | 9.4 | 1.5 | -15.6 |
| Romania | 2.0 | -7.2 | -22.4 | -3.8 | 10.5 | 8.5 | 18.3 | -6.3 | -5.8 | 3.7 | 4.0 |
| Eastern Europe | 1.3 | -4.3 | -5.3 | 4.0 | 3.9 | 5.8 | 4.8 | 3.4 | 3.3 | 0.9 | -0.4 |
| USSR | 7.5 | 6.4 | 9.7 | 4.0 | 4.4 | 4.7 | -6.0 | -1.6 | 4.0 | 9.3 | -5.0 |
| Eastern Europe and the USSR | 3.9 | 0.9 | 2.2 | 4.2 | 3.9 | 5.3 | -0.6 | 1.0 | 3.7 | 4.5 | -1.0 |

*Sources*: UN/DIESA and ECE, based on national data.

[a] Preliminary estimate.

Table A.11. Eastern Europe and the Soviet Union: inflation and real wages, 1980-1990[a]
(Annual percentage change)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Bulgaria** | | | | | | | | | | | |
| Consumer prices[b] | 14.0 | 0.4 | 0.3 | 1.4 | 0.7 | 1.7 | 2.7 | 2.7 | 2.4 | 6.2 | 19.3 |
| Real wages | -3.2 | 4.8 | 2.5 | -0.1 | 3.2 | 1.4 | 1.6 | 4.3 | 3.7 | -1.2 | .. |
| **Czechoslovakia** | | | | | | | | | | | |
| Consumer prices[c] | 3.4 | 0.9 | 4.7 | 1.1 | 0.9 | 1.3 | 0.4 | 0.1 | 0.2 | 1.5 | 9.9 |
| Real wages | -1.1 | 0.6 | -2.3 | 0.7 | 0.8 | 0.3 | 1.1 | 1.9 | 2.1 | 0.8 | -5.6 |
| **German Democratic Republic** | | | | | | | | | | | |
| Consumer prices[d] | 0.4 | 0.2 | .. | .. | .. | .. | -0.2 | 0.5 | 2.2 | 2.3 | -2.5 |
| Real wages | 1.1 | 2.2 | 1.9 | 1.3 | 2.0 | -4.1 | 3.7 | 4.9 | 0.7 | 0.2 | .. |
| **Hungary** | | | | | | | | | | | |
| Consumer prices | 9.1 | 4.6 | 6.9 | 7.3 | 8.3 | 7.0 | 5.3 | 8.6 | 15.5 | 18.8 | 28.9 |
| Real wages | -2.8 | 1.7 | -0.4 | -2.3 | 3.6 | 2.6 | 1.9 | -0.4 | 12.1 | -4.3 | -3.8 |
| **Poland** | | | | | | | | | | | |
| Consumer prices[e] | 9.1 | 24.4 | 101.5 | 23.0 | 15.8 | 14.4 | 17.3 | 25.5 | 59.0 | 259.5 | 584.7 |
| Real wages | 3.9 | 2.4 | -24.9 | 1.2 | 0.5 | 3.8 | 2.7 | -3.5 | 14.4 | 8.3 | -27.3 |
| **Romania** | | | | | | | | | | | |
| Consumer prices[b] | 3.0 | 1.9 | 16.9 | 5.3 | 1.1 | 0.4 | 0.3 | 0.4 | 1.7 | 0.9 | 5.7 |
| Real wages | 3.1 | 2.6 | -7.7 | -2.2 | 5.5 | 1.5 | 0.7 | 0.2 | 0.9 | 3.1 | 11.6 |
| **Soviet Union** | | | | | | | | | | | |
| Consumer prices[b,f] | 0.7 | 1.4 | 3.4 | 0.7 | -1.3 | 0.8 | 1.9 | 1.9 | 2.3 | 1.9 | 5.3 |
| Real wages | 2.7 | 0.7 | -0.6 | 1.1 | 3.8 | 2.2 | 0.9 | 1.8 | 5.9 | 7.3 | 6.6 |

*Source*: ECE.

◆ Indicates discontinuity in the series.

[a] Gross remuneration of full-time workers and employees in the socialist sector, excluding cooperative farmers, deflated by the consumer price index.

[b] Retail prices in the State sector.

[c] Cost of living index for workers and employees.

[d] Including fees and charges of various kinds (1985 weights).

[e] Cost of living index for workers and employees in the socialist sector.

[f] Including public catering; based on rounded index numbers ; 1970-1987: approved "list price" changes only.

Table A.12. Developing countries: investment, saving and net transfers, 1980-1989
(Percentage of GDP)

| Country and grouping | Gross domestic investment | | | Gross domestic savings | | | Net transfer of resources | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1985 | 1989 | 1980 | 1985 | 1989 | 1980 | 1985 | 1989 |
| All developing countries | 25.2 | 23.2 | 24.7 | 26.6 | 23.6 | 24.7 | -1.4 | -0.4 | - - |
| by region: | | | | | | | | | |
| Latin America | 24.0 | 17.6 | 20.0 | 22.6 | 22.4 | 21.6 | 1.4 | -4.7 | -1.6 |
| Africa | 23.1 | 19.0 | 19.3 | 22.5 | 17.7 | 15.1 | 0.6 | 1.3 | 4.2 |
| West Asia | 21.3 | 21.6 | 22.0 | 50.8 | 21.7 | 23.9 | -29.5 | -0.1 | -1.9 |
| South and East Asia | 26.4 | 24.9 | 26.7 | 23.9 | 23.8 | 26.3 | 2.5 | 1.1 | 0.4 |
| Mediterranean | 22.5 | 21.5 | 22.9 | 14.4 | 17.8 | 22.4 | 8.1 | 3.7 | 0.5 |
| by analytical grouping: | | | | | | | | | |
| Capital-surplus countries | 20.9 | 21.8 | 24.9 | 57.3 | 23.6 | 26.5 | -36.4 | -1.8 | -1.6 |
| Capital-importing countries | 24.2 | 20.8 | 22.7 | 26.1 | 22.0 | 22.8 | -1.9 | -1.3 | -0.1 |
| Energy exporters | 25.1 | 21.6 | 21.4 | 36.1 | 25.1 | 23.8 | -11.0 | -3.5 | -2.5 |
| Energy importers | 23.4 | 20.1 | 23.2 | 18.6 | 19.7 | 22.3 | 4.8 | 0.4 | 0.9 |
| Recent surplus economies | 34.3 | 26.1 | 29.6 | 29.1 | 31.5 | 35.1 | 5.2 | -5.4 | -5.6 |
| Other countries | 22.3 | 18.6 | 20.9 | 17.7 | 17.9 | 18.9 | 4.6 | 0.8 | 2.0 |
| Memo item: | | | | | | | | | |
| Sub-Saharan Africa | 20.0 | 18.4 | 21.6 | 13.5 | 15.3 | 14.1 | 6.5 | 3.0 | 7.5 |
| Fifteen heavily indebted countries | 23.9 | 16.4 | 19.8 | 23.4 | 21.2 | 21.6 | 0.5 | -4.8 | -1.8 |
| Selected developing countries | | | | | | | | | |
| Argentina | 22.2 | 8.5 | 12.0 | 20.0 | 15.2 | 19.0 | 2.2 | -6.6 | -7.0 |
| Bangladesh | 15.1 | 12.5 | 11.7 | 2.1 | 1.8 | 1.1 | 12.9 | 10.6 | 10.5 |
| Brazil | 22.9 | 16.7 | 22.4 | 20.7 | 21.7 | 22.5 | 2.2 | -5.0 | -0.1 |
| China | 32.2 | 38.7 | 36.4 | 32.2 | 34.5 | 35.7 | - - | 4.2 | 0.7 |
| Côte d'Ivoire | 28.2 | 12.6 | 10.3 | 22.2 | 25.8 | 13.1 | 6.1 | -13.2 | -2.8 |
| Egypt | 27.5 | 26.7 | 19.3 | 15.2 | 14.6 | 5.7 | 12.4 | 12.1 | 13.6 |
| India | 22.8 | 25.9 | 23.0 | 19.2 | 22.8 | 20.0 | 3.6 | 3.1 | 2.9 |
| Indonesia | 24.3 | 24.0 | 23.5 | 37.1 | 26.8 | 26.7 | -12.8 | -2.7 | -3.2 |
| Kenya | 30.0 | 25.9 | 25.5 | 18.7 | 24.8 | 19.7 | 11.4 | 1.1 | 5.8 |
| Mexico | 27.2 | 21.9 | 19.3 | 24.9 | 26.8 | 20.4 | 2.3 | -4.9 | -1.1 |
| Nigeria | 20.5 | 7.5 | 12.5 | 29.5 | 10.8 | 21.0 | -9.1 | -3.3 | -8.4 |
| Peru | 27.5 | 22.4 | 19.9 | 27.5 | 27.0 | 22.3 | - - | -4.7 | -2.4 |
| Republic of Korea | 31.7 | 29.3 | 34.5 | 24.3 | 30.5 | 37.3 | 7.4 | -1.3 | -2.8 |
| Sudan | 15.1 | 4.5 | 9.1 | 3.4 | -3.8 | 2.2 | 11.6 | 8.4 | 6.9 |
| Thailand | 26.4 | 24.0 | 32.5 | 20.1 | 21.2 | 23.0 | 6.3 | 2.8 | 9.5 |
| Tunisia | 29.4 | 26.6 | 22.8 | 24.0 | 20.4 | 18.7 | 5.4 | 6.1 | 4.2 |
| Turkey | 21.9 | 21.0 | 22.4 | 14.1 | 17.8 | 22.5 | 7.8 | 3.2 | -0.1 |
| United Republic of Tanzania | 23.0 | 15.7 | 21.2 | 9.8 | 7.4 | -10.0 | 13.2 | 8.3 | 31.2 |
| Zambia | 23.3 | 14.9 | 16.6 | 19.3 | 14.1 | 12.2 | 4.0 | 0.8 | 4.4 |

*Source*: UN/DIESA, based on World Bank, *World Tables* and Secretariat estimates.

Table A.13. Developing countries: structure of trade in goods and services, 1980-1988
(Percentage)

| Country and grouping | Share in total exports of goods and services of: Manufactures | | | Non-fuel primary commodities | | | Travel receipts and remittances | | | Fuels trade balance | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1985 | 1988 | 1980 | 1985 | 1988 | 1980 | 1985 | 1988 | 1980 | 1985 | 1988 |
| All developing countries | 20.9 | 32.9 | 48.1 | 18.2 | 17.4 | 17.7 | 6.9 | 7.7 | 9.8 | 37.9 | 17.6 | 10.0 |
| by region: | | | | | | | | | | | | |
| Latin America | 13.8 | 18.5 | 28.0 | 31.9 | 29.0 | 33.4 | 5.9 | 6.2 | 7.9 | 14.0 | 19.3 | 9.0 |
| Africa | 5.0 | 7.2 | 13.9 | 24.2 | 22.9 | 30.3 | 9.5 | 12.4 | 17.7 | 48.3 | 42.7 | 24.4 |
| West Asia | 4.8 | 9.5 | 17.9 | 1.3 | 2.6 | 4.2 | 2.6 | 3.3 | 3.7 | 79.0 | 50.7 | 39.4 |
| South and East Asia | 46.5 | 56.6 | 66.4 | 22.1 | 15.3 | 13.4 | 7.5 | 7.1 | 9.4 | -5.9 | -3.6 | -2.4 |
| Mediterranean | 40.8 | 51.4 | 47.0 | 22.8 | 17.5 | 17.3 | 44.1 | 27.2 | 30.5 | -36.5 | -23.8 | -12.7 |
| by analytical grouping: | | | | | | | | | | | | |
| Capital-surplus countries | 2.2 | 4.3 | 10.6 | 0.4 | 1.2 | 2.2 | 1.0 | 0.1 | 0.2 | 87.0 | 60.9 | 50.8 |
| Capital-importing countries | 20.1 | 32.3 | 46.9 | 17.9 | 17.2 | 17.8 | 7.2 | 7.9 | 10.3 | 33.6 | 11.0 | 7.6 |
| Energy exporters | 3.7 | 8.3 | 19.3 | 7.7 | 9.1 | 12.8 | 3.8 | 4.9 | 7.1 | 78.8 | 61.5 | 44.6 |
| Energy importers | 40.8 | 50.4 | 58.5 | 30.8 | 23.2 | 19.9 | 11.4 | 10.1 | 11.6 | -21.5 | -23.9 | -5.8 |
| Recent surplus economies | 67.3 | 73.5 | 77.2 | 10.0 | 7.6 | 6.9 | 4.1 | 4.0 | 7.9 | -13.5 | -9.3 | -4.0 |
| Other countries | 25.1 | 32.0 | 36.9 | 43.1 | 35.8 | 34.8 | 15.7 | 15.1 | 15.8 | -26.0 | -32.1 | -7.0 |
| Memo item: | | | | | | | | | | | | |
| Sub-Saharan Africa | 8.1 | 9.7 | 13.7 | 58.2 | 52.0 | 55.2 | 5.7 | 6.7 | 7.3 | -1.3 | 3.2 | -1.4 |
| Fifteen heavily indebted countries | 15.4 | 22.3 | 31.8 | 28.1 | 26.6 | 30.3 | 8.5 | 7.9 | 10.7 | 22.2 | 20.7 | 9.3 |
| Selected developing countries | | | | | | | | | | | | |
| Argentina | 16.6 | 17.4 | 20.4 | 52.5 | 58.0 | 57.4 | 3.1 | 5.1 | 5.6 | -7.2 | 1.5 | -2.1 |
| Bangladesh | 52.2 | 50.7 | 55.2 | 25.5 | 23.9 | 23.4 | 21.8 | 31.7 | 48.7 | -42.6 | -31.3 | -17.8 |
| Brazil | 33.4 | 39.1 | 44.3 | 51.4 | 42.7 | 44.6 | 0.6 | 0.2 | 0.3 | -44.6 | -17.5 | -8.5 |
| China | 43.1 | 42.7 | 64.7 | 25.0 | 21.5 | 17.2 | - - | 3.7 | 3.6 | 20.7 | 22.2 | 5.5 |
| Côte d'Ivoire | 8.1 | 8.3 | 10.0 | 73.0 | 76.4 | 69.0 | 2.2 | 1.1 | 2.4 | -8.7 | -3.7 | -7.8 |
| Egypt | 5.5 | 6.8 | 12.8 | 11.0 | 8.3 | 6.8 | 46.4 | 40.1 | 47.0 | 47.6 | 42.4 | 28.7 |
| India | 41.9 | 45.5 | 57.9 | 25.3 | 20.7 | 18.9 | 35.1 | 23.4 | 22.3 | -49.6 | -25.8 | -12.9 |
| Indonesia | 2.4 | 12.2 | 26.1 | 25.4 | 18.6 | 25.6 | 0.8 | 3.0 | 6.5 | 60.6 | 43.7 | 27.0 |
| Kenya | 10.2 | 7.7 | 9.7 | 35.6 | 44.1 | 38.0 | 11.6 | 15.5 | 20.9 | -21.0 | -19.0 | -14.3 |
| Mexico | 10.2 | 15.7 | 36.3 | 12.6 | 9.6 | 8.8 | 15.1 | 10.4 | 13.4 | 45.4 | 47.5 | 19.5 |
| Nigeria | 0.5 | 0.6 | 2.0 | 3.4 | 2.0 | 8.8 | 0.3 | 0.3 | 0.7 | 88.4 | 87.2 | 77.4 |
| Peru | 13.8 | 16.2 | 15.3 | 50.8 | 43.0 | 51.4 | 6.1 | 7.6 | 11.0 | 14.8 | 15.4 | 4.7 |
| Republic of Korea | 69.6 | 83.6 | 79.7 | 7.6 | 5.1 | 5.1 | 1.6 | 2.4 | 4.4 | -29.2 | -19.3 | -7.6 |
| Sudan | 1.8 | 3.4 | 5.5 | 69.5 | 66.0 | 65.7 | 31.7 | 60.4 | 49.8 | -22.3 | -31.5 | -23.4 |
| Thailand | 22.0 | 27.4 | 37.7 | 53.4 | 41.3 | 34.9 | 10.1 | 11.4 | 14.3 | -33.0 | -19.5 | -9.7 |
| Tunisia | 23.9 | 29.0 | 35.7 | 7.8 | 8.4 | 11.0 | 29.9 | 30.6 | 43.7 | 13.3 | 14.7 | 3.2 |
| Turkey | 21.3 | 45.4 | 42.1 | 56.8 | 23.8 | 22.2 | 65.3 | 24.7 | 23.1 | -98.8 | -29.0 | -14.5 |
| United Republic of Tanzania | 12.0 | 10.4 | 14.8 | 62.3 | 47.4 | 66.0 | 4.2 | 15.0 | 6.8 | -33.7 | -55.8 | -35.2 |
| Zambia | 0.8 | 2.3 | 2.0 | 81.9 | 90.5 | 92.5 | 1.3 | 0.9 | 0.4 | -11.0 | -15.8 | -5.6 |

*Source*: UN/DIESA, based on World Bank, *World Tables*, and Secretariat estimates.

Table A.14. Developing countries: inflation, 1980-1990[a]
(Annual percentage change)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| All developing countries | 32.9 | 34.1 | 32.3 | 59.0 | 83.7 | 110.8 | 40.7 | 59.0 | 139.0 | 434.9 | 400 |
| by region: | | | | | | | | | | | |
| Latin America | 56.5 | 62.7 | 69.0 | 139.3 | 198.0 | 289.8 | 92.3 | 137.6 | 352.5 | 1 110.0 | 1 200 |
| Africa | 15.4 | 22.1 | 12.4 | 23.2 | 23.4 | 10.8 | 12.7 | 14.4 | 22.7 | 26.0 | 21 |
| West Asia | 18.2 | 22.8 | 16.3 | 18.8 | 33.4 | 24.6 | 10.8 | 14.0 | 13.6 | 11.0 | 14 |
| South and East Asia | 16.0 | 13.9 | 7.6 | 8.3 | 10.0 | 5.3 | 4.9 | 6.0 | 7.4 | 6.7 | 9 |
| Mediterranean | 69.7 | 34.2 | 32.3 | 35.5 | 49.4 | 58.0 | 62.3 | 80.0 | 134.6 | 670.8 | 350 |
| China | 7.4 | 2.5 | 2.0 | 1.9 | 2.7 | 11.9 | 7.0 | 8.8 | 20.7 | 16.3 | 2 |
| by analytical grouping: | | | | | | | | | | | |
| Capital-surplus countries | 10.9 | 11.9 | 8.2 | 8.3 | 4.7 | 0.4 | 6.1 | 11.2 | 12.3 | 10.0 | .. |
| Capital-importing countries | 35.6 | 36.8 | 35.3 | 65.2 | 93.6 | 124.4 | 45.0 | 64.9 | 154.5 | 487.1 | .. |
| Energy exporters | 17.2 | 18.5 | 22.8 | 36.2 | 31.2 | 101.5 | 29.7 | 42.4 | 53.6 | 93.9 | .. |
| Energy importers | 48.3 | 49.5 | 43.9 | 85.3 | 138.2 | 140.1 | 55.5 | 80.4 | 224.2 | 758.6 | .. |
| Recent surplus economies | 21.6 | 17.4 | 6.3 | 3.9 | 4.0 | 1.7 | 1.9 | 2.5 | 5.0 | 5.8 | .. |
| Other | 52.0 | 53.9 | 49.1 | 69.6 | 151.5 | 159.4 | 63.0 | 91.2 | 254.6 | 863.2 | .. |
| Memo item: | | | | | | | | | | | |
| Sub-Saharan Africa | 17.6 | 27.9 | 13.5 | 30.6 | 30.6 | 10.7 | 11.5 | 16.3 | 31.6 | 35.0 | 33 |
| Fifteen heavily indebted countries | 50.3 | 56.2 | 60.1 | 120.3 | 172.7 | 245.6 | 81.1 | 120.8 | 285.9 | 930.7 | 800 |

*Source*: UN/DIESA, based on IMF, *International Financial Statistics*, and Secretariat estimates.

[a] Weights used are GDP in 1980 dollars.

[b] Preliminary estimates based on data for part of the year.

Table A.15. Selected developing countries or areas: real effective exchange rates, 1981-1990
(1980-1982 = 100)

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 107.5 | 77.0 | 71.6 | 80.2 | 71.0 | 61.1 | 53.7 | 59.9 | 51.7 | 60.3 |
| Brazil | 103.2 | 113.0 | 86.0 | 85.7 | 85.2 | 74.9 | 74.3 | 81.4 | 99.2 | 118.7 |
| Chile | 108.1 | 97.3 | 89.3 | 90.1 | 79.6 | 68.8 | 65.6 | 60.6 | 62.2 | 61.0 |
| Colombia | 100.4 | 105.9 | 104.9 | 99.6 | 86.1 | 68.1 | 63.7 | 61.5 | 60.8 | 55.4 |
| Israel | 99.2 | 108.7 | 120.8 | 119.5 | 106.6 | 101.0 | 97.6 | 107.1 | 109.4 | 105.8 |
| Mexico | 114.1 | 82.7 | 79.0 | 91.9 | 87.4 | 62.8 | 64.6 | 76.9 | 73.7 | 68.9 |
| Peru | 103.2 | 105.1 | 98.5 | 105.8 | 96.8 | 97.0 | 108.8 | 130.0 | 139.9 | 183.6 |
| Venezuela | 99.6 | 110.2 | 117.3 | 85.9 | 93.0 | 90.7 | 65.3 | 72.0 | 63.2 | 52.5 |
| Hong Kong | 99.4 | 101.4 | 94.9 | 99.5 | 103.6 | 94.0 | 90.0 | 90.7 | 98.8 | 99.1 |
| Indonesia | 99.7 | 111.7 | 96.2 | 96.0 | 94.7 | 53.6 | 56.1 | 54.1 | 55.7 | 57.5 |
| Malaysia | 99.3 | 105.6 | 113.9 | 119.6 | 116.3 | 95.5 | 89.5 | 80.4 | 80.0 | 75.7 |
| Philippines | 101.2 | 106.7 | 96.1 | 107.9 | 114.7 | 91.0 | 87.7 | 89.5 | 95.7 | 88.4 |
| Republic of Korea | 101.2 | 101.9 | 97.6 | 96.5 | 89.4 | 76.4 | 75.7 | 82.4 | 92.3 | 85.3 |
| Singapore | 101.9 | 100.8 | 101.8 | 102.5 | 95.7 | 80.9 | 74.6 | 73.2 | 78.2 | 81.1 |
| Taiwan Province of China | 102.6 | 96.6 | 94.6 | 97.1 | 94.2 | 86.4 | 91.7 | 95.2 | 100.9 | 94.0 |
| Turkey | 104.4 | 96.1 | 94.2 | 89.6 | 89.8 | 71.9 | 63.8 | 65.1 | 73.7 | 76.8 |

*Source*: Morgan Guaranty Trust Company, *World Financial Markets*, various issues.

## II. INTERNATIONAL TRADE

Table A.16. Direction of trade: exports, 1980-1989

| Origin \ Destination | | World | Developed market economies | Eastern Europe and the Soviet Union | Developing countries total | Latin America | Africa | West Asia | South and East Asia | China |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Billions of dollars | Percentage | | | | | | | |
| World | 1980 | **2 000.9** | 67.6 | 7.2 | 24.4 | 6.3 | 4.2 | 4.8 | 7.5 | 1.1 |
| | 1985 | **1 933.4** | 66.4 | 7.8 | 24.6 | 4.8 | 3.3 | 4.6 | 8.6 | 2.2 |
| | 1989 | **3 026.3** | 69.8 | 6.3 | 22.2 | 3.9 | 2.3 | 3.0 | 10.3 | 2.0 |
| Developed market economies | 1980 | **1 267.9** | 71.2 | 3.6 | 24.4 | 6.0 | 5.2 | 5.3 | 6.6 | 1.1 |
| | 1985 | **1 266.9** | 74.0 | 2.7 | 22.2 | 4.5 | 3.8 | 4.5 | 7.0 | 2.0 |
| | 1989 | **2 134.1** | 76.6 | 2.2 | 19.6 | 3.9 | 2.3 | 2.7 | 8.9 | 1.2 |
| Eastern Europe and the Soviet Union | 1980 | **155.1** | 31.1 | 50.7 | 17.6 | 3.3 | 2.8 | 3.8 | 2.0 | 2.7 |
| | 1985 | **172.2** | 24.0 | 53.2 | 21.4 | 4.0 | 2.5 | 3.0 | 2.2 | 3.7 |
| | 1989 | **212.9** | 24.2 | 53.2 | 16.8 | 4.0 | 1.7 | 2.3 | 2.1 | 4.2 |
| Developing countries | 1980 | **577.9** | 69.3 | 3.3 | 26.2 | 7.7 | 2.5 | 4.0 | 11.2 | 0.7 |
| | 1985 | **494.3** | 61.6 | 5.3 | 31.8 | 5.7 | 2.7 | 5.5 | 14.7 | 2.4 |
| | 1989 | **679.3** | 62.5 | 4.2 | 32.1 | 4.0 | 2.5 | 4.0 | 17.4 | 3.8 |
| of which: Latin America | 1980 | **107.8** | 64.8 | 6.5 | 27.1 | 21.3 | 2.2 | 1.5 | 1.3 | 0.7 |
| | 1985 | **109.2** | 69.0 | 8.0 | 20.8 | 11.9 | 2.5 | 1.9 | 2.8 | 1.5 |
| | 1989 | **116.0** | 70.9 | 6.7 | 20.6 | 12.1 | 1.3 | 1.6 | 4.0 | 1.4 |
| Africa | 1980 | **94.9** | 83.8 | 2.6 | 12.8 | 6.2 | 3.1 | 1.9 | 1.2 | 0.4 |
| | 1985 | **59.3** | 80.4 | 4.1 | 14.3 | 3.9 | 5.0 | 2.0 | 1.7 | 0.3 |
| | 1989 | **57.4** | 76.6 | 4.3 | 17.4 | 1.9 | 7.4 | 2.7 | 3.5 | 1.0 |
| West Asia | 1980 | **211.0** | 72.0 | 1.6 | 24.9 | 5.6 | 1.7 | 5.3 | 12.2 | 0.1 |
| | 1985 | **104.8** | 50.2 | 2.5 | 46.3 | 8.8 | 2.9 | 13.6 | 20.0 | 0.1 |
| | 1989 | **88.5** | 58.1 | 3.8 | 36.6 | 6.7 | 3.3 | 11.3 | 14.1 | 0.2 |
| South and East Asia | 1980 | **141.6** | 62.3 | 2.5 | 34.2 | 2.6 | 3.0 | 5.3 | 21.1 | 1.9 |
| | 1985 | **178.5** | 62.7 | 2.0 | 34.0 | 1.7 | 2.0 | 4.1 | 20.6 | 5.2 |
| | 1989 | **346.2** | 63.1 | 1.2 | 34.7 | 1.5 | 1.7 | 2.8 | 21.9 | 6.5 |
| China | 1980 | **20.4** | 43.8 | 13.1 | 43.1 | 1.9 | 5.6 | 4.9 | 30.6 | - |
| | 1985 | **30.1** | 39.2 | 12.6 | 48.2 | 2.2 | 1.9 | 6.0 | 36.3 | - |
| | 1989 | **54.5** | 35.8 | 11.5 | 52.7 | 1.2 | 3.4 | 6.0 | 41.0 | - |

*Source*: UNCTAD secretariat computations, based on data from the Statistical Office of the United Nations Secretariat.

Table A.17. Direction of trade: imports (f.o.b.), 1980-1989

| Origin \ Destination | | World | Developed market economies | Eastern Europe and the Soviet Union | Developing countries total | Latin America | Africa | West Asia | South and East Asia | China |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *Billions of dollars* | | | | | |
| **World** | **1980** | **2 000.9** | **1 351.7** | **143.9** | **488.2** | **126.1** | **84.4** | **96.5** | **150.7** | **22.8** |
| | **1985** | **1 933.4** | **1 283.3** | **151.7** | **475.3** | **92.6** | **63.6** | **89.0** | **165.5** | **43.3** |
| | **1989** | **3 026.3** | **2 111.4** | **189.8** | **670.9** | **119.1** | **68.9** | **89.4** | **312.6** | **59.5** |
| | | | | | *Percentage* | | | | | |
| Developed | 1980 | 63.4 | 66.8 | 32.2 | 63.4 | 60.5 | 77.9 | 70.2 | 55.2 | 63.7 |
| market | 1985 | 65.5 | 73.1 | 22.2 | 59.2 | 61.9 | 71.9 | 63.4 | 53.6 | 57.7 |
| economies | 1989 | 70.5 | 77.4 | 25.1 | 62.2 | 70.1 | 69.9 | 64.1 | 60.8 | 42.2 |
| Eastern | 1980 | 7.8 | 3.6 | 54.7 | 5.6 | 4.1 | 5.2 | 6.0 | 2.1 | 18.3 |
| Europe and | 1985 | 8.9 | 3.2 | 60.4 | 7.3 | 7.5 | 6.8 | 5.9 | 2.3 | 14.6 |
| the Soviet Union | 1989 | 7.0 | 2.4 | 59.7 | 5.3 | 7.2 | 5.2 | 5.5 | 1.4 | 15.0 |
| Developing | 1980 | 28.9 | 29.6 | 13.2 | 31.0 | 35.4 | 16.9 | 23.8 | 42.8 | 18.0 |
| countries | 1985 | 25.6 | 23.7 | 17.3 | 33.0 | 30.6 | 21.3 | 30.7 | 44.0 | 27.6 |
| | 1989 | 22.4 | 20.1 | 15.2 | 32.5 | 22.7 | 24.9 | 30.4 | 37.8 | 42.8 |
| of which: | | | | | | | | | | |
| Latin America | 1980 | 5.4 | 5.2 | 4.8 | 6.0 | 18.2 | 2.8 | 1.6 | 0.9 | 3.3 |
| | 1985 | 5.6 | 5.9 | 5.8 | 4.8 | 14.1 | 4.3 | 2.3 | 1.9 | 3.9 |
| | 1989 | 3.8 | 3.9 | 4.1 | 3.6 | 11.8 | 2.1 | 2.1 | 1.5 | 2.7 |
| Africa | 1980 | 4.7 | 5.9 | 1.7 | 2.5 | 4.7 | 3.5 | 1.9 | 0.7 | 1.5 |
| | 1985 | 3.1 | 3.7 | 1.6 | 1.8 | 2.5 | 4.6 | 1.3 | 0.6 | 0.4 |
| | 1989 | 1.9 | 2.1 | 1.3 | 1.5 | 0.9 | 6.2 | 1.7 | 0.6 | 1.0 |
| West Asia | 1980 | 10.5 | 11.2 | 2.3 | 10.8 | 9.3 | 4.2 | 11.5 | 17.1 | 1.4 |
| | 1985 | 5.4 | 4.1 | 1.7 | 10.2 | 9.9 | 4.7 | 16.1 | 12.7 | 0.4 |
| | 1989 | 2.9 | 2.4 | 1.8 | 4.8 | 5.0 | 4.2 | 11.2 | 4.0 | 0.2 |
| South and | 1980 | 7.1 | 6.5 | 2.5 | 9.9 | 2.9 | 5.0 | 7.7 | 19.8 | 11.7 |
| East Asia | 1985 | 9.2 | 8.7 | 2.3 | 12.8 | 3.2 | 5.7 | 8.3 | 22.2 | 21.4 |
| | 1989 | 11.4 | 10.3 | 2.3 | 17.9 | 4.3 | 8.7 | 10.8 | 24.2 | 37.9 |
| China | 1980 | 1.0 | 0.7 | 1.9 | 1.8 | 0.3 | 1.4 | 1.0 | 4.1 | - |
| | 1985 | 1.6 | 0.9 | 2.5 | 3.0 | 0.7 | 0.9 | 2.0 | 6.6 | - |
| | 1989 | 1.8 | 0.9 | 3.3 | 4.3 | 0.5 | 2.7 | 3.7 | 7.1 | - |

*Source*: UNCTAD secretariat computations, based on data from the Statistical Office of the United Nations Secretariat.

Table A.18. Commodity composition of world trade: exports, 1980-1988
(Billions of dollars and percentage)

| Exporting country groups | TOTAL EXPORTS (billions of dollars) 1980 | 1988 | Primary commodities: Food 1980 | 1988 | Agricultural raw materials 1980 | 1988 | Fuels 1980 | 1988 | Ores and metals 1980 | 1988 |
|---|---|---|---|---|---|---|---|---|---|---|
| World (billions of dollars) | **2 000.9** | **2 829.1** | 221.1 | 279.5 | 73.9 | 100.1 | 480.8 | 266.8 | 93.4 | 106.9 |
| World | | | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) |
| Developed market economies | **1 267.9** | **1 982.2** | 64.9 | 65.9 | 61.9 | 66.9 | 18.4 | 26.9 | 68.1 | 66.8 |
| Eastern Europe and the USSR | **155.1** | **216.1** | 4.4 | 3.7 | 8.8 | 7.5 | 8.8 | 19.5 | 5.3 | 5.4 |
| Developing countries | **577.9** | **630.8** | 30.7 | 30.4 | 29.3 | 25.6 | 72.8 | 53.6 | 26.6 | 27.8 |
| Latin America | **107.8** | **110.1** | 14.2 | 12.0 | 4.6 | 4.0 | 9.5 | 8.2 | 10.9 | 11.6 |
| Africa | **94.9** | **55.3** | 4.6 | 3.5 | 4.0 | 3.0 | 14.9 | 10.6 | 6.0 | 4.5 |
| West Asia | **211.0** | **87.0** | 1.2 | 1.5 | 1.3 | 0.8 | 41.5 | 24.8 | 1.2 | 1.5 |
| South and East Asia | **141.6** | **311.5** | 8.0 | 9.9 | 17.1 | 14.1 | 6.3 | 7.9 | 6.4 | 6.3 |
| China | **20.4** | **51.5** | 2.3 | 2.7 | 2.1 | 3.0 | 0.6 | 2.1 | 1.2 | 2.1 |

| Exporting country groups | Manufactures: Textiles 1980 | 1988 | Chemicals 1980 | 1988 | Machinery and transport 1980 | 1988 | Metal manufactures 1980 | 1988 | Other manufactures 1980 | 1988 |
|---|---|---|---|---|---|---|---|---|---|---|
| World (billions of dollars) | 96.1 | 177.4 | 140.7 | 252.7 | 513.1 | 994.4 | 114.2 | 150.8 | 221.1 | 404.7 |
| World | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) |
| Developed market economies | 62.1 | 49.0 | 87.8 | 84.4 | 85.5 | 82.0 | 86.2 | 76.7 | 80.9 | 74.7 |
| Eastern Europe and the USSR | 5.0 | 4.5 | 5.5 | 5.3 | 9.0 | 6.5 | 6.8 | 7.4 | 5.2 | 4.3 |
| Developing countries | 32.9 | 46.5 | 6.7 | 10.3 | 5.5 | 11.4 | 7.0 | 15.9 | 13.9 | 21.0 |
| Latin America | 2.2 | 1.9 | 2.0 | 2.0 | 1.0 | 1.5 | 1.6 | 4.1 | 1.7 | 2.0 |
| Africa | 1.2 | 2.1 | 0.6 | 1.0 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.4 |
| West Asia | 1.5 | 2.6 | 1.0 | 1.1 | 0.3 | 0.3 | 0.4 | 1.2 | 0.6 | 0.6 |
| South and East Asia | 23.1 | 32.3 | 2.3 | 4.7 | 3.9 | 9.0 | 4.0 | 8.2 | 9.9 | 16.2 |
| China | 4.8 | 7.1 | 0.8 | 1.1 | 0.1 | 0.2 | 0.6 | 0.9 | 1.2 | 1.2 |

*Source*: UNCTAD secretariat computations, based on data from the Statistical Office of the United Nations Secretariat.

Table A.19. Commodity composition of world trade: imports, 1980-1988
(Billions of dollars and percentage)

| Importing country groups | TOTAL IMPORTS (billions of dollars) 1980 | 1988 | Primary commodities: Food 1980 | 1988 | Agricultural raw materials 1980 | 1988 | Fuels 1980 | 1988 | Ores and metals 1980 | 1988 |
|---|---|---|---|---|---|---|---|---|---|---|
| World (billions of dollars) | **2 000.9** | **2 829.1** | 221.1 | 279.5 | 73.9 | 100.1 | 480.8 | 266.8 | 93.4 | 106.9 |
| World | | | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) |
| Developed market economies | **1 351.7** | **1 964.0** | 61.3 | 69.4 | 69.6 | 68.3 | 76.1 | 63.9 | 79.8 | 76.0 |
| Eastern Europe and the USSR | **143.3** | **192.4** | 10.3 | 7.2 | 7.4 | 5.9 | 3.9 | 11.8 | 5.6 | 4.6 |
| Developing countries | **488.2** | **642.9** | 26.8 | 22.9 | 22.7 | 25.4 | 18.1 | 22.4 | 12.6 | 18.8 |
| Latin America | **126.1** | **115.1** | 6.0 | 3.9 | 3.1 | 3.1 | 6.7 | 5.7 | 3.1 | 2.9 |
| Africa | **84.4** | **68.7** | 6.1 | 4.2 | 2.3 | 1.8 | 1.6 | 1.9 | 1.3 | 1.2 |
| West Asia | **96.5** | **90.1** | 5.7 | 4.7 | 2.2 | 1.6 | 2.0 | 2.5 | 1.5 | 1.8 |
| South and East Asia | **150.7** | **281.6** | 7.0 | 7.7 | 10.6 | 13.0 | 7.4 | 9.9 | 5.0 | 10.1 |
| China | **22.8** | **59.2** | 1.7 | 1.8 | 4.2 | 4.2 | 0.1 | 0.8 | 0.7 | 1.3 |

| Importing country groups | Textiles 1980 | 1988 | Manufactures: Chemicals 1980 | 1988 | Machinery and transport 1980 | 1988 | Metal manufactures 1980 | 1988 | Other manufactures 1980 | 1988 |
|---|---|---|---|---|---|---|---|---|---|---|
| World (billions of dollars) | 96.1 | 177.4 | 140.7 | 252.7 | 513.1 | 994.4 | 114.2 | 150.8 | 221.1 | 404.7 |
| World | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) | (100) |
| Developed market economies | 70.4 | 71.3 | 64.9 | 67.2 | 60.4 | 70.3 | 57.4 | 65.8 | 72.6 | 76.9 |
| Eastern Europe and the USSR | 6.9 | 5.1 | 7.4 | 5.5 | 8.7 | 6.6 | 9.3 | 7.9 | 5.5 | 4.4 |
| Developing countries | 22.4 | 23.3 | 27.4 | 26.1 | 30.4 | 22.5 | 32.7 | 26.0 | 21.5 | 18.1 |
| Latin America | 3.6 | 2.2 | 8.0 | 5.3 | 7.8 | 4.5 | 6.4 | 3.5 | 4.9 | 2.8 |
| Africa | 4.5 | 2.4 | 4.7 | 2.7 | 6.2 | 2.4 | 6.4 | 3.1 | 3.9 | 1.8 |
| West Asia | 5.8 | 3.7 | 4.3 | 2.9 | 6.9 | 3.0 | 8.7 | 4.2 | 5.6 | 3.3 |
| South and East Asia | 7.4 | 10.8 | 8.7 | 11.2 | 8.1 | 9.9 | 8.5 | 10.1 | 6.2 | 8.4 |
| China | 1.0 | 2.4 | 1.6 | 3.1 | 1.3 | 2.0 | 2.3 | 4.0 | 0.7 | 1.3 |

*Source*: UNCTAD secretariat computations, based on data from the Statistical Office of the United Nations Secretariat.

Table A.20. World trade: changes in volume, prices and terms of trade, by major country group, 1981-1991
(Annual percentage change)

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] | 1991[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volume of exports** | | | | | | | | | | | |
| World | 0.9 | -2.1 | 1.8 | 8.2 | 3.5 | 4.8 | 6.4 | 8.0 | 6.6 | 4.3 | 2.9 |
| Developed market economies | 3.0 | -2.0 | 2.2 | 10.1 | 4.8 | 3.1 | 4.4 | 7.7 | 6.7 | 5.4 | 4.0 |
| Developing countries | -4.3 | -4.3 | -0.5 | 4.4 | 1.5 | 9.6 | 12.9 | 9.7 | 8.3 | 5.6 | 3.2 |
| Capital-surplus countries | -18.4 | -18.8 | -15.9 | -12.0 | -6.6 | 18.9 | 2.4 | 5.7 | 11.7 | 3.1 | .. |
| Other net energy exporters | -6.9 | -3.4 | 2.5 | 7.7 | -2.2 | 1.8 | 12.8 | 5.0 | 10.9 | 6.4 | .. |
| Net energy importers | 11.2 | 5.4 | 7.0 | 10.1 | 5.3 | 8.9 | 15.7 | 12.3 | 6.5 | 5.1 | .. |
| China | 16.7 | 13.8 | 5.5 | 11.6 | 14.3 | 19.5 | 24.0 | 15.7 | 6.3 | 12.8 | .. |
| Eastern Europe and the USSR | 2.3 | 4.9 | 5.8 | 4.9 | -0.7 | 3.8 | 2.1 | 4.2 | -1.0 | -11.4 | -10.7 |
| **Volume of imports** | | | | | | | | | | | |
| World | 1.3 | -1.8 | 1.0 | 8.7 | 3.1 | 3.5 | 5.6 | 8.7 | 6.9 | 3.9 | 3.1 |
| Developed market economies | -3.0 | -2.1 | 1.8 | 11.7 | 4.3 | 7.0 | 6.5 | 7.7 | 6.8 | 5.1 | 3.5 |
| Developing countries | 14.0 | -2.2 | -2.0 | 2.6 | -1.0 | -5.2 | 4.2 | 13.6 | 8.2 | 1.6 | 4.0 |
| Capital-surplus countries | 27.2 | 8.4 | -3.6 | -11.0 | -19.0 | -18.0 | -12.5 | 7.2 | 3.7 | -2.8 | .. |
| Other net energy exporters | 23.8 | -5.3 | -13.6 | 2.5 | -8.2 | -14.7 | -1.2 | 5.2 | 7.8 | 8.0 | .. |
| Net energy importers | 6.3 | -4.2 | 2.6 | 5.4 | 0.3 | 2.9 | 10.6 | 16.4 | 9.3 | 2.9 | .. |
| China | 14.4 | -4.1 | 13.5 | 27.9 | 66.7 | -14.5 | -6.3 | 15.8 | 5.0 | -16.6 | .. |
| Eastern Europe and the USSR | 0.9 | 2.2 | 4.2 | 3.9 | 5.3 | -0.7 | 1.0 | 3.7 | 4.5 | -1.0 | -5.5 |
| **Unit value of exports** | | | | | | | | | | | |
| World | -2.3 | -4.3 | -3.7 | -2.3 | -2.2 | 5.1 | 10.4 | 4.9 | 1.0 | 8.5 | 7.4 |
| Developed market economies | -5.0 | -3.5 | -3.3 | -3.2 | -1.5 | 13.2 | 12.1 | 5.8 | 0.4 | 9.4 | 9.1 |
| Developing countries | 3.9 | -7.4 | -5.7 | 0.6 | -4.1 | -15.5 | 8.1 | 4.5 | 4.1 | 7.2 | 1.2 |
| Capital-surplus countries | 12.2 | -4.3 | -9.8 | -1.0 | -2.8 | -35.8 | 10.3 | -9.2 | 12.2 | 20.1 | -8.6 |
| Other net energy exporters | 6.4 | -5.7 | -5.7 | -0.4 | -4.6 | -29.9 | 8.0 | -2.9 | 7.3 | 12.3 | -5.1 |
| Net energy importers | -4.1 | -8.9 | -1.6 | 2.7 | -4.0 | -1.5 | 7.3 | 9.3 | 2.5 | 3.1 | 4.9 |
| China | 1.6 | -10.4 | -3.8 | 0.3 | -3.8 | -4.6 | 2.4 | 3.9 | 2.2 | 4.6 | 5.8 |
| Eastern Europe and the USSR | -1.4 | 0.1 | -0.8 | -3.2 | -1.2 | 6.2 | 7.4 | -0.4 | -1.3 | 2.5 | 9.3 |
| **Unit value of imports** | | | | | | | | | | | |
| World | -1.8 | -4.1 | -3.5 | -2.3 | -2.5 | 6.0 | 10.7 | 4.9 | 1.2 | 8.7 | 7.0 |
| Developed market economies | -1.8 | -4.1 | -3.8 | -2.3 | -2.0 | 5.8 | 11.3 | 5.1 | 1.4 | 9.1 | 7.1 |
| Developing countries | -2.3 | -4.4 | -3.7 | -2.3 | -2.3 | 5.1 | 10.4 | 4.9 | 1.7 | 9.0 | 6.3 |
| Capital-surplus countries | -4.3 | -4.1 | -3.1 | -2.4 | -1.9 | 8.4 | 11.0 | 5.7 | 1.2 | 8.5 | 7.3 |
| Other net energy exporters | -3.3 | -4.0 | -3.3 | -2.2 | -1.9 | 8.6 | 11.3 | 5.4 | 1.2 | 8.9 | 7.5 |
| Net energy importers | -0.9 | -4.2 | -4.3 | -2.0 | -2.2 | 1.5 | 10.9 | 4.2 | 2.1 | 9.3 | 5.8 |
| China | -5.2 | -8.9 | -0.6 | -4.9 | -1.7 | 18.8 | 7.2 | 10.0 | 0.4 | 7.5 | 6.5 |
| Eastern Europe and the USSR | -0.8 | -3.5 | -1.0 | -2.7 | -7.3 | 10.2 | 6.1 | 4.1 | -2.2 | 1.4 | 7.9 |
| **Terms of trade** | | | | | | | | | | | |
| World | -0.4 | -0.2 | -0.2 | 0.0 | 0.3 | -0.8 | -0.3 | 0.0 | -0.2 | -0.2 | 0.3 |
| Developed market economies | -3.3 | 0.6 | 0.6 | -0.9 | 0.6 | 7.0 | 0.8 | 0.8 | -1.0 | 0.3 | 1.8 |
| Developing countries | 6.4 | -3.2 | -2.1 | 2.9 | -1.8 | -19.6 | -2.1 | -0.4 | 2.4 | -1.6 | -4.7 |
| Capital-surplus countries | 17.3 | -0.2 | -6.9 | 1.4 | -0.8 | -40.8 | -0.7 | -14.1 | 10.8 | 10.8 | -14.8 |
| Other net energy exporters | 10.1 | -1.7 | -2.5 | 1.8 | -2.7 | -35.5 | -3.0 | -7.9 | 6.0 | 3.2 | -11.8 |
| Net energy importers | -3.3 | -4.9 | 2.8 | 4.8 | -1.8 | -2.9 | -3.2 | 4.9 | 0.4 | -5.7 | -0.8 |
| China | 7.2 | -1.7 | -3.3 | 5.5 | -2.1 | -19.7 | -4.5 | -5.5 | 1.8 | -2.7 | -0.7 |
| Eastern Europe and the USSR | -0.6 | 3.7 | 0.2 | -0.5 | 6.6 | -3.6 | 1.2 | -4.3 | 0.9 | 1.0 | 1.2 |

*Source*: UN/DIESA.

[a] Preliminary estimates.

[b] Forecast, based in part on Project LINK.

Table A.21. Indices of prices of non-fuel primary commodities exported by developing countries, 1980-1990 (1985 = 100)

| | | Food | Tropical beverages | Vegetable oilseeds and oils | Agri-cultural raw materials | Minerals and metals | Combined index | | Prices of manufac-tures[a] | Real prices of commodities[b] | Memo item: crude petroleum[c] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Dollar | SDR | | | |
| 1980 | | 240 | 118 | 117 | 136 | 144 | 171 | 134 | 116 | 147 | 110 |
| 1981 | | 192 | 67 | 112 | 119 | 121 | 142 | 122 | 109 | 130 | 123 |
| 1982 | | 131 | 92 | 90 | 103 | 105 | 111 | 102 | 107 | 104 | 120 |
| 1983 | | 138 | 96 | 107 | 110 | 113 | 118 | 112 | 103 | 114 | 105 |
| 1984 | | 116 | 110 | 144 | 111 | 105 | 114 | 112 | 100 | 114 | 102 |
| 1985 | | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1986 | | 110 | 124 | 62 | 102 | 95 | 104 | 90 | 120 | 87 | 54 |
| 1987 | | 117 | 81 | 73 | 119 | 113 | 107 | 84 | 135 | 79 | 64 |
| 1988 | | 152 | 82 | 96 | 129 | 164 | 135 | 102 | 144 | 94 | 51 |
| 1989 | | 161 | 70 | 85 | 129 | 164 | 135 | 107 | 143 | 94 | 62 |
| 1990 | | 151 | 62 | 74 | 137 | 149 | 127 | 95 | 158 | 80 | 79 |
| 1989 | I | 154 | 86 | 92 | 131 | 182 | 140 | 108 | 144 | 97 | 60 |
| | II | 163 | 80 | 92 | 129 | 168 | 139 | 111 | 142 | 98 | 63 |
| | III | 164 | 59 | 80 | 128 | 156 | 132 | 106 | 142 | 93 | 58 |
| | IV | 164 | 54 | 77 | 128 | 149 | 130 | 103 | 145 | 89 | 64 |
| 1990 | I | 165 | 58 | 74 | 132 | 140 | 129 | 99 | 151 | 85 | 70 |
| | II | 157 | 63 | 73 | 135 | 148 | 130 | 100 | 152 | 85 | 58 |
| | III | 145 | 62 | 73 | 140 | 160 | 128 | 95 | 159 | 80 | 86 |
| | IV | 137 | 63 | 77 | 142 | 148 | 123 | 87 | 167 | 73 | 102 |

*Sources*: UNCTAD, *Monthly Commodity Price Bulletin*, and United Nations, *Monthly Bulletin of Statistics*.

[a] Unit value of exports of manufactures from developed market economies. The base of the original index has been shifted to 1985.

[b] Dollar index deflated by prices of manufactures.

[c] OPEC oil price.

Table A.22. World balance of payments on current account by country group, 1980-1990[a]
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Developed market economies | -35.3 | -2.5 | -3.7 | 3.7 | -28.2 | -28.6 | 9.3 | -16.8 | -14.6 | -35.7 | -50.7 |
| Major developed market economies of which: | -10.2 | 23.2 | 19.5 | 11.1 | -29.8 | -29.0 | 11.1 | -12.4 | -2.9 | -12.8 | -19.6 |
| Germany[c] | -7.0 | 2.7 | 11.2 | 11.0 | 16.0 | 23.4 | 47.7 | 56.8 | 62.2 | 67.7 | 59.3 |
| Japan | -9.5 | 6.2 | 8.1 | 22.2 | 36.4 | 50.5 | 87.3 | 89.7 | 82.6 | 60.3 | 40.3 |
| United States | 8.4 | 14.1 | 2.5 | -31.5 | -88.2 | -108.8 | -131.4 | -149.7 | -115.7 | -96.6 | -79.3 |
| Other industrial countries | -25.1 | -25.8 | -23.2 | -7.3 | 1.6 | 0.5 | -1.8 | -4.3 | -11.7 | -23.0 | -31.0 |
| Developing countries | 32.9 | -37.5 | -75.7 | -54.8 | -27.5 | -30.3 | -50.6 | -11.6 | -21.7 | -13.1 | -6.9 |
| Capital surplus countries | 104.4 | 61.4 | 17.9 | -2.4 | 1.8 | 7.0 | -8.4 | 2.0 | 1.7 | 12.1 | 26.0 |
| Capital-importing countries | -71.4 | -98.9 | -93.6 | -52.4 | -29.2 | -37.4 | -42.2 | -13.7 | -23.4 | -25.2 | -32.9 |
| Energy exporters | -0.4 | -29.2 | -35.2 | -11.6 | -1.8 | -3.0 | -21.6 | -4.8 | -17.8 | -9.6 | -4.0 |
| Energy importers | -68.6 | -71.7 | -64.2 | -45.2 | -29.8 | -22.9 | -13.5 | -9.2 | -1.7 | -11.1 | -34.4 |
| Recent surplus economies | -8.9 | -7.2 | -2.9 | 1.4 | 6.7 | 10.4 | 23.1 | 30.8 | 28.4 | 23.8 | 16.0 |
| Other | -59.7 | -64.6 | -61.3 | -46.7 | -36.5 | -33.3 | -36.6 | -40.0 | -30.2 | -34.9 | -50.3 |
| China | -2.4 | 2.0 | 5.9 | 4.4 | 2.4 | -11.5 | -7.2 | 0.3 | -3.8 | -4.5 | 5.6 |
| Eastern Europe and the Soviet Union[d] | -3.5 | -6.4 | 4.2 | 8.0 | 10.4 | 3.1 | 0.8 | 7.6 | 3.2 | -6.1 | -9.4 |
| Eastern Europe | -6.5 | -4.8 | 0.7 | 2.2 | 3.7 | 3.0 | 0.3 | 0.5 | 0.9 | -2.2 | -4.9 |
| Soviet Union | 3.0 | -1.6 | 3.6 | 5.8 | 6.7 | 0.1 | 0.4 | 7.1 | 2.3 | -4.0 | -4.5 |
| World residual[e] | 5.9 | 46.4 | 75.2 | 43.1 | 45.3 | 55.8 | 40.6 | 20.8 | 33.1 | 55.0 | 66.9 |
| of which: | | | | | | | | | | | |
| Trade residual (imports, f.o.b.) | -43.4 | -31.8 | -12.6 | -20.7 | -30.5 | -18.3 | -13.2 | -35.7 | -35.0 | -17.1 | -25.4 |
| Services and private transfers | 49.2 | 78.2 | 87.8 | 63.8 | 75.7 | 74.1 | 53.8 | 56.5 | 68.1 | 72.0 | 92.3 |

*Source*: UN/DIESA, based on data of IMF and other national and international sources.

[a] Balance on goods, services and private transfers.

[b] Preliminary estimate.

[c] Including transactions of the former German Democratic Republic as from July 1990.

[d] Balance in convertible currencies; total includes the former German Democratic Republic.

[e] Unreported trade, services and private transfers, as well as errors and timing asymmetries in reported data.

Table A.23. Current account transactions: developed market economies, 1980-1990[a]
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Major developed market economies** | | | | | | | | | | | |
| Merchandise exports | 895.9 | 905.2 | 846.2 | 836.6 | 897.7 | 926.1 | 1 071.6 | 1 238.8 | 1 435.5 | 1 540.3 | 1 747.0 |
| Merchandise imports (f.o.b.) | -929.6 | -905.5 | -845.8 | -848.8 | -944.4 | -965.1 | -1 070.7 | -1 249.8 | -1 426.3 | -1 546.6 | -1 755.8 |
| Trade balance | -33.7 | -0.3 | 0.4 | -12.1 | -46.7 | -39.0 | 0.8 | -11.0 | 9.3 | -6.3 | -8.8 |
| Net services and private transfers | 23.5 | 23.6 | 19.1 | 23.2 | 16.9 | 10.0 | 10.2 | -1.4 | -12.2 | -6.5 | -10.8 |
| of which: investment income | 27.5 | 23.6 | 18.2 | 22.5 | 21.4 | 14.1 | 14.0 | 13.7 | 13.7 | 13.7 | 24.7 |
| Current account balance | -10.2 | 23.2 | 19.5 | 11.1 | -29.8 | -29.0 | 11.1 | -12.4 | -2.9 | -12.8 | -19.6 |
| of which: | | | | | | | | | | | |
| **Germany[c]** | | | | | | | | | | | |
| Merchandise exports | 183.2 | 166.8 | 165.8 | 159.9 | 161.4 | 173.7 | 231.0 | 278.1 | 308.2 | 324.3 | 391.5 |
| Merchandise imports (f.o.b.) | -174.5 | -150.7 | -141.1 | -138.5 | -139.2 | -145.1 | -175.3 | -208.3 | -228.8 | -247.6 | -319.6 |
| Trade balance | 8.7 | 16.1 | 24.7 | 21.4 | 22.2 | 28.6 | 55.8 | 69.8 | 79.4 | 76.7 | 71.9 |
| Net services and private transfers | -15.7 | -13.4 | -13.5 | -10.5 | -6.2 | -5.1 | -8.1 | -13.1 | -17.2 | -9.0 | -12.6 |
| of which: investment income | 1.9 | 0.6 | -1.2 | 1.6 | 3.6 | 3.3 | 4.2 | 4.1 | 5.1 | 11.8 | 16.5 |
| Current account balance | -7.0 | 2.7 | 11.2 | 11.0 | 16.0 | 23.4 | 47.7 | 56.8 | 62.2 | 67.7 | 59.3 |
| **Japan** | | | | | | | | | | | |
| Merchandise exports | 126.7 | 149.5 | 137.7 | 145.5 | 168.3 | 174.0 | 205.6 | 224.6 | 259.8 | 269.6 | 280.2 |
| Merchandise imports (f.o.b.) | -124.6 | -129.6 | -119.6 | -114.0 | -124.0 | -118.0 | -112.8 | -128.2 | -164.8 | -192.7 | -216.3 |
| Trade balance | 2.1 | 20.0 | 18.1 | 31.5 | 44.3 | 56.0 | 92.8 | 96.4 | 95.0 | 76.9 | 63.9 |
| Net services and private transfers | -11.6 | -13.8 | -9.9 | -9.3 | -7.9 | -5.5 | -5.5 | -6.7 | -12.4 | -16.6 | -23.6 |
| of which: investment income | 0.9 | -0.8 | 1.7 | 3.1 | 4.2 | 6.8 | 9.5 | 16.7 | 21.0 | 23.4 | 23.2 |
| Current account balance | -9.5 | 6.2 | 8.1 | 22.2 | 36.4 | 50.5 | 87.3 | 89.7 | 82.6 | 60.3 | 40.3 |
| **United States** | | | | | | | | | | | |
| Merchandise exports | 224.3 | 237.1 | 211.2 | 201.8 | 219.9 | 215.9 | 223.4 | 250.3 | 320.3 | 360.5 | 389.3 |
| Merchandise imports (f.o.b.) | -249.8 | -265.1 | -247.6 | -268.9 | -332.4 | -338.1 | -368.4 | -409.8 | -447.3 | -475.3 | -498.0 |
| Trade balance | -25.5 | -28.0 | -36.4 | -67.1 | -112.5 | -122.2 | -145.1 | -159.5 | -127.0 | -114.9 | -108.7 |
| Net services and private transfers | 33.9 | 42.1 | 38.9 | 35.6 | 24.4 | 13.3 | 13.7 | 9.8 | 11.3 | 18.3 | 29.4 |
| of which: investment income | 28.8 | 31.4 | 28.3 | 27.4 | 23.4 | 16.1 | 11.0 | 5.3 | 1.5 | -0.9 | 7.5 |
| Current account balance | 8.4 | 14.1 | 2.5 | -31.5 | -88.2 | -108.8 | -131.4 | -149.7 | -115.7 | -96.6 | -79.3 |
| **Other industrial countries** | | | | | | | | | | | |
| Merchandise exports | 352.6 | 330.0 | 312.5 | 309.1 | 323.5 | 333.0 | 394.2 | 474.8 | 538.7 | 570.0 | 674.6 |
| Merchandise imports (f.o.b.) | -388.4 | -360.4 | -338.7 | -319.2 | -323.7 | -332.4 | -398.7 | -486.8 | -555.2 | -592.2 | -697.4 |
| Trade balance | -35.8 | -30.4 | -26.3 | -10.2 | -0.2 | 0.7 | -4.6 | -12.0 | -16.5 | -22.2 | -22.8 |
| Net services and private transfers | 10.8 | 4.6 | 3.1 | 2.8 | 1.8 | -0.2 | 2.8 | 7.7 | 4.8 | -0.8 | -8.2 |
| of which: investment income | -6.9 | -12.3 | -12.8 | -12.8 | -13.6 | -15.5 | -16.9 | -17.3 | -21.5 | -24.7 | -29.3 |
| Current account balance | -25.1 | -25.8 | -23.2 | -7.3 | 1.6 | 0.5 | -1.8 | -4.3 | -11.7 | -23.0 | -31.0 |
| **All developed market economies** | | | | | | | | | | | |
| Merchandise exports | 1 248.4 | 1 235.2 | 1 158.7 | 1 145.7 | 1 221.2 | 1 259.1 | 1 465.7 | 1 713.6 | 1 974.2 | 2 110.3 | 2 421.6 |
| Merchandise imports (f.o.b.) | -1 317.9 | -1 265.9 | -1 184.6 | -1 168.0 | -1 268.1 | -1 297.5 | -1 469.5 | -1 736.6 | -1 981.4 | -2 138.8 | -2 453.2 |
| Trade balance | -69.5 | -30.7 | -25.9 | -22.3 | -46.9 | -38.4 | -3.7 | -23.0 | -7.3 | -28.5 | -31.6 |
| Net services and private transfers | 34.3 | 28.2 | 22.2 | 26.0 | 18.8 | 9.8 | 13.0 | 6.3 | -7.4 | -7.3 | -19.1 |
| of which: investment income | 20.6 | 11.3 | 5.4 | 9.7 | 7.8 | -1.4 | -2.8 | -3.6 | -7.8 | -11.0 | -4.5 |
| Current account balance | -35.3 | -2.5 | -3.7 | 3.7 | -28.2 | -28.6 | 9.3 | -16.8 | -14.6 | -35.7 | -50.7 |

*Source*: UN/DIESA, based on data of IMF and national sources.

[a] Balance on goods, services and private transfers.

[b] Preliminary (based in part on Secretariat estimates).

[c] Including transactions of the former German Democratic Republic as from July 1990.

Table A.24. Current account transactions: Eastern Europe and the Soviet Union, 1980-1990[a]
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Eastern Europe[c]** | | | | | | | | | | | |
| Merchandise exports | 31.9 | 32.3 | 31.5 | 32.2 | 34.0 | 34.0 | 31.5 | 34.4 | 37.3 | 38.7 | 39.1 |
| Merchandise imports (f.o.b.) | -35.0 | -31.7 | -26.3 | -26.5 | -27.3 | -28.2 | -28.7 | -32.4 | -34.5 | -37.3 | -42.1 |
| Trade balance | -3.1 | 0.6 | 5.2 | 5.7 | 6.7 | 5.8 | 2.8 | 2.0 | 2.8 | 1.4 | -3.0 |
| Net services and private transfers | -3.4 | -5.4 | -4.5 | -3.5 | -3.0 | -2.8 | -2.5 | -1.5 | -1.9 | -3.6 | -1.9 |
| Current account balance | -6.5 | -4.8 | 0.7 | 2.2 | 3.7 | 3.0 | 0.3 | 0.5 | 0.9 | -2.2 | -4.9 |
| **Soviet Union** | | | | | | | | | | | |
| Merchandise exports | 38.2 | 39.1 | 43.4 | 44.2 | 43.3 | 36.9 | 34.6 | 40.8 | 42.7 | 45.1 | 48.8 |
| Merchandise imports (f.o.b.) | -34.8 | -39.9 | -39.1 | -38.0 | -36.6 | -36.2 | -33.3 | -32.7 | -39.2 | -47.4 | -50.2 |
| Trade balance | 3.4 | -0.8 | 4.3 | 6.2 | 6.7 | 0.7 | 1.3 | 8.1 | 3.5 | -2.3 | -1.4 |
| Net services and private transfers | -0.4 | -0.8 | -0.7 | -0.4 | — | -0.6 | -0.9 | -1.0 | -1.2 | -1.7 | -3.1 |
| Current account balance | 3.0 | -1.6 | 3.6 | 5.8 | 6.7 | 0.1 | 0.4 | 7.1 | 2.3 | -4.0 | -4.5 |
| **Eastern Europe and the Soviet Union[c]** | | | | | | | | | | | |
| Merchandise exports | 70.1 | 71.4 | 74.9 | 76.4 | 77.3 | 70.9 | 66.1 | 75.2 | 80.0 | 83.8 | 87.9 |
| Merchandise imports (f.o.b.) | -69.8 | -71.6 | -65.4 | -64.5 | -63.9 | -64.4 | -62.0 | -65.1 | -73.7 | -84.7 | -92.3 |
| Trade balance | 0.3 | -0.2 | 9.5 | 11.9 | 13.4 | 6.5 | 4.1 | 10.1 | 6.3 | -0.9 | -4.4 |
| Net services and private transfers | -3.8 | -6.2 | -5.3 | -3.9 | -3.0 | -3.4 | -3.3 | -2.5 | -3.1 | -5.2 | -5.0 |
| Current account balance | -3.5 | -6.4 | 4.2 | 8.0 | 10.4 | 3.1 | 0.8 | 7.6 | 3.2 | -6.1 | -9.4 |

*Source*: Data of ECE.

[a] Balance on goods, services and private transfers in convertible currencies.

[b] Preliminary.

[c] Including transactions of the former German Democratic Republic.

Table A.25. Current account transactions: developing countries, 1980-1990[a]
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Surplus energy exporters** (8 economies) | | | | | | | | | | | |
| Merchandise exports | 215.9 | 197.5 | 155.9 | 121.1 | 110.5 | 93.9 | 61.0 | 75.2 | 74.5 | 90.9 | 104.5 |
| Merchandise imports (f.o.b.) | -75.1 | -91.5 | -95.3 | -86.4 | -74.5 | -60.2 | -52.7 | -54.9 | -57.8 | -60.5 | -61.3 |
| Trade balance | 140.8 | 106.0 | 60.6 | 34.7 | 36.0 | 33.7 | 8.4 | 20.3 | 16.7 | 30.4 | 43.2 |
| Net services and private transfers | -36.5 | -44.5 | -42.7 | -37.2 | -34.2 | -26.7 | -16.8 | -18.3 | -15.0 | -18.3 | -17.2 |
| of which: investment income | 11.4 | 15.2 | 18.4 | 19.7 | 15.8 | 16.2 | 18.8 | 15.8 | 17.4 | 18.2 | 18.9 |
| Current account balance | 104.4 | 61.4 | 17.9 | -2.4 | 1.8 | 7.0 | -8.4 | 2.0 | 1.7 | 12.1 | 26.0 |
| **Deficit energy exporters** (19 economies) | | | | | | | | | | | |
| Merchandise exports | 140.3 | 140.2 | 125.9 | 121.3 | 132.4 | 126.4 | 88.8 | 108.2 | 110.8 | 132.0 | 162.5 |
| Merchandise imports (f.o.b.) | -108.0 | -128.4 | -116.2 | -97.8 | -97.0 | -92.2 | -80.0 | -84.7 | -100.8 | -114.2 | -136.3 |
| Trade balance | 32.3 | 11.8 | 9.6 | 23.5 | 35.4 | 34.2 | 8.8 | 23.4 | 10.0 | 17.7 | 26.2 |
| Net services and private transfers | -32.8 | -41.0 | -44.8 | -35.1 | -37.2 | -37.2 | -30.4 | -28.3 | -27.8 | -27.4 | -30.2 |
| of which: investment income | -17.0 | -19.8 | -25.2 | -23.7 | -25.9 | -25.0 | -21.3 | -23.5 | -24.3 | -27.0 | -27.1 |
| Current account balance | -0.4 | -29.2 | -35.2 | -11.6 | -1.8 | -3.0 | -21.6 | -4.8 | -17.8 | -9.6 | -4.0 |
| **Energy-importing countries** (100 economies) | | | | | | | | | | | |
| Merchandise exports | 201.0 | 214.6 | 204.2 | 211.5 | 240.6 | 237.0 | 261.3 | 324.8 | 398.1 | 434.6 | 466.9 |
| Merchandise imports (f.o.b.) | -258.8 | -271.4 | -249.7 | -240.6 | -248.0 | -241.7 | -256.5 | -318.4 | -383.5 | -430.7 | -481.9 |
| Trade balance | -57.8 | -56.8 | -45.5 | -29.1 | -7.3 | -4.7 | 4.8 | 6.6 | 14.6 | 3.9 | -15.0 |
| Net services and private transfers | -10.8 | -15.0 | -18.7 | -16.2 | -22.5 | -18.2 | -18.3 | -15.7 | -16.3 | -15.0 | -19.4 |
| of which: investment income | -21.2 | -29.8 | -37.2 | -35.5 | -38.3 | -37.7 | -37.0 | -37.7 | -39.0 | -38.3 | -37.7 |
| Current account balance | -68.6 | -71.7 | -64.0 | -45.2 | -29.8 | -22.9 | -13.5 | -9.2 | -1.7 | -11.1 | -34.4 |
| **Recent surplus economies** (4 economies) | | | | | | | | | | | |
| Merchandise exports | 74.7 | 84.6 | 83.1 | 90.7 | 107.6 | 108.6 | 130.2 | 175.4 | 221.1 | 243.7 | 261.6 |
| Merchandise imports (f.o.b.) | -83.9 | -93.7 | -90.5 | -93.2 | -101.0 | -99.8 | -111.1 | -150.0 | -198.9 | -224.3 | -252.0 |
| Trade balance | -9.2 | -9.0 | -7.4 | -2.5 | 6.5 | 8.8 | 19.1 | 25.4 | 22.2 | 19.3 | 9.6 |
| Net services and private transfers | 0.2 | 1.9 | 4.5 | 4.0 | 0.2 | 1.6 | 4.1 | 5.4 | 6.3 | 4.5 | 4.5 |
| of which: investment income | -2.6 | -3.8 | -3.6 | -2.9 | -2.2 | -1.4 | -0.7 | -0.1 | 2.0 | 3.2 | 4.9 |
| Current account balance | -8.9 | -7.2 | -2.9 | 1.4 | 6.7 | 10.4 | 23.1 | 30.8 | 28.4 | 23.8 | 16.0 |
| **Other energy importers** (96 economies) | | | | | | | | | | | |
| Merchandise exports | 126.2 | 129.9 | 121.1 | 120.9 | 133.1 | 128.4 | 131.1 | 149.4 | 177.0 | 190.9 | 205.3 |
| Merchandise imports (f.o.b.) | -174.9 | -177.7 | -159.2 | -147.4 | -146.9 | -141.9 | -145.4 | -168.3 | -184.6 | -206.4 | -229.8 |
| Trade balance | -48.6 | -47.7 | -38.1 | -26.6 | -13.9 | -13.5 | -14.2 | -18.9 | -7.6 | -15.5 | -24.5 |
| Net services and private transfers | -11.1 | -16.9 | -23.2 | -20.1 | -22.6 | -19.8 | -22.4 | -21.1 | -22.6 | -19.5 | -25.8 |
| of which: investment income | -18.6 | -26.0 | -33.6 | -32.6 | -36.1 | -36.3 | -36.2 | -37.6 | -41.0 | -41.5 | -42.6 |
| Current account balance | -59.7 | -64.6 | -61.3 | -46.7 | -36.5 | -33.3 | -36.6 | -40.0 | -30.2 | -34.9 | -50.3 |
| **China** | | | | | | | | | | | |
| Merchandise exports | 18.5 | 22.0 | 21.1 | 20.7 | 23.9 | 25.1 | 25.8 | 34.7 | 41.1 | 43.2 | 51.0 |
| Merchandise imports (f.o.b.) | -21.2 | -20.3 | -16.9 | -18.7 | -23.9 | -38.2 | -34.9 | -36.4 | -46.4 | -48.8 | -44.1 |
| Trade balance | -2.8 | 1.7 | 4.2 | 2.0 | — | -13.1 | -9.1 | -1.7 | -5.3 | -5.6 | 7.0 |
| Net services and private transfers | 0.3 | 0.3 | 1.6 | 2.4 | 2.4 | 1.6 | 2.0 | 2.0 | 1.5 | 1.2 | -1.4 |
| of which: investment income | -0.1 | -0.2 | 0.4 | 1.2 | 1.5 | 0.8 | 0.0 | -0.2 | -0.2 | 0.2 | 0.2 |
| Current account balance | -2.4 | 2.0 | 5.9 | 4.4 | 2.4 | -11.5 | -7.2 | 0.3 | -3.8 | -4.5 | 5.6 |
| **Long-term capital-importing countries** (120 economies) | | | | | | | | | | | |
| Merchandise exports | 359.8 | 376.8 | 351.2 | 353.6 | 397.0 | 388.5 | 375.9 | 467.7 | 549.9 | 609.8 | 680.4 |
| Merchandise imports (f.o.b.) | -388.0 | -420.0 | -382.8 | -357.2 | -368.9 | -372.1 | -371.4 | -439.4 | -530.7 | -593.8 | -662.2 |
| Trade balance | -28.2 | -43.2 | -31.6 | -3.6 | 28.1 | 16.4 | 4.5 | 28.3 | 19.3 | 16.0 | -18.2 |
| Net services and private transfers | -43.2 | -55.7 | -61.9 | -48.8 | -57.3 | -53.8 | -46.7 | -42.0 | -42.6 | -41.2 | -51.0 |
| of which: investment income | -38.3 | -49.8 | -62.0 | -58.0 | -62.7 | -61.9 | -58.2 | -61.5 | -63.5 | -65.0 | -64.6 |
| Current account balance | -71.4 | -98.9 | -93.6 | -52.4 | -29.2 | -37.4 | -42.2 | -13.7 | -23.4 | -25.2 | -32.9 |

Table A.25. *(continued)*
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **All developing countries** | | | | | | | | | | | |
| (128 economies) | | | | | | | | | | | |
| Merchandise exports | 575.7 | 574.2 | 507.1 | 474.7 | 507.5 | 482.5 | 436.9 | 542.9 | 624.5 | 700.7 | 784.9 |
| Merchandise imports (f.o.b.) | -463.1 | -511.5 | -478.1 | -443.6 | -443.4 | -432.3 | -424.1 | -494.3 | -588.5 | -654.3 | -723.5 |
| Trade balance | 112.6 | 62.7 | 29.0 | 31.1 | 64.0 | 50.2 | 12.8 | 48.7 | 35.9 | 46.4 | 61.4 |
| Net services and private transfers | -79.7 | -100.2 | -104.6 | -85.9 | -91.5 | -80.5 | -63.5 | -60.3 | -57.6 | -59.6 | -68.2 |
| of which: investment income | -26.9 | -34.6 | -43.6 | -38.3 | -46.9 | -45.7 | -39.4 | -45.7 | -46.1 | -46.8 | -45.7 |
| Current account balance | 32.9 | -37.5 | -75.7 | -54.8 | -27.5 | -30.3 | -50.6 | -11.6 | -21.7 | -13.1 | -6.9 |

*Source*: UN/DIESA, based on data of IMF, official national and other sources.

[a] Balance on goods, services and private transfers.

[b] Preliminary estimate.

Table A.26. Net transfer of financial resources of industrial countries, 1980-1990
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **United States** | | | | | | | | | | | |
| Net capital flow | 11.2 | 1.1 | 8.7 | 45.2 | 104.4 | 126.8 | 142.2 | 157.7 | 124.8 | 144.0 | 112.9 |
| Private grants[b] | -0.4 | -0.6 | -0.9 | -0.9 | -1.2 | -1.4 | -1.2 | -1.2 | -0.9 | -0.4 | -0.3 |
| Official grants | -6.0 | -5.8 | -8.3 | -8.7 | -10.8 | -13.4 | -14.0 | -12.5 | -13.3 | -13.4 | -19.9 |
| Direct investment[c] | 9.5 | 26.2 | 19.9 | 18.6 | 28.3 | 21.3 | 27.7 | 37.9 | 48.3 | 63.0 | 20.9 |
| Portfolio | 10.5 | 15.5 | 9.5 | 1.7 | 25.0 | 68.6 | 81.5 | 61.7 | 66.0 | 75.1 | -1.0 |
| Medium- and long-term loans | -9.0 | -19.0 | -22.7 | -18.0 | -12.8 | 8.0 | -5.1 | -0.8 | 11.5 | 2.6 | 23.1 |
| Short-term capital | -19.0 | -34.9 | -25.5 | 41.0 | 48.8 | 23.8 | 37.5 | 69.7 | 21.5 | -5.5 | 17.1 |
| Errors and omissions | 25.7 | 19.6 | 36.7 | 11.4 | 27.2 | 19.9 | 15.9 | 2.9 | -8.3 | 22.6 | 73.1 |
| Use of IMF credit | — | — | — | — | — | — | — | — | — | — | — |
| Net dividends and interest | 17.0 | 20.8 | 21.2 | 14.0 | 9.1 | 0.7 | -1.4 | -12.9 | -4.5 | -23.4 | -24.0 |
| Net transfer of resources (financial basis) | 28.2 | 21.8 | 29.9 | 59.3 | 113.5 | 127.4 | 140.8 | 144.7 | 120.3 | 120.6 | 88.9 |
| Use of official reserves[d] | -8.1 | -5.2 | -5.0 | -1.2 | -3.1 | -3.8 | 0.3 | 9.1 | -3.9 | -25.3 | -2.2 |
| **Net transfer of resources (expenditure basis)** | **20.1** | **16.7** | **24.9** | **58.1** | **110.3** | **123.6** | **141.1** | **153.9** | **116.4** | **95.3** | **86.6** |
| **United Kingdom** | | | | | | | | | | | |
| Net capital flow | -12.8 | -21.3 | -12.5 | -7.7 | -3.2 | -6.4 | 2.9 | 28.7 | 37.3 | 24.4 | 27.9 |
| Private grants[b] | -0.5 | 0.1 | 0.1 | 0.5 | 0.5 | 0.4 | 0.1 | -0.2 | -0.5 | -0.5 | -0.5 |
| Official grants | -3.7 | -2.8 | -3.1 | -2.9 | -2.9 | -4.2 | -3.3 | -5.3 | -5.9 | -7.0 | -7.4 |
| Direct investment[c] | -2.5 | -5.3 | -0.8 | -1.5 | -5.2 | -4.8 | -4.6 | -10.3 | -9.0 | 6.8 | 28.0 |
| Portfolio | -4.3 | -8.6 | -12.9 | -8.0 | -11.3 | -15.4 | -25.9 | 29.7 | 7.5 | -41.0 | -18.8 |
| Medium- and long-term loans | -2.1 | -3.9 | -1.7 | -3.9 | -2.4 | 2.1 | 6.6 | 2.1 | 3.4 | 8.6 | 5.2 |
| Short-term capital | -0.6 | -1.7 | 10.3 | 7.6 | 10.6 | 8.7 | 9.9 | 0.2 | 27.8 | 31.8 | 14.8 |
| Errors and omissions | 1.1 | 1.3 | -4.1 | 0.7 | 7.5 | 6.9 | 20.1 | 12.5 | 14.0 | 25.7 | 6.6 |
| Use of IMF credit | -0.3 | -0.3 | -0.3 | -0.1 | — | — | — | — | — | — | — |
| Net dividends and interest | 0.9 | 1.5 | 1.6 | 2.8 | 2.8 | 1.8 | 3.1 | 0.2 | -3.0 | -1.8 | -4.4 |
| Net transfer of resources (financial basis) | -11.9 | -19.8 | -11.0 | -4.9 | -0.4 | -4.6 | 6.0 | 28.9 | 34.3 | 22.7 | 23.5 |
| Use of official reserves[d] | -0.6 | 4.7 | 2.4 | 0.9 | 1.3 | -0.6 | -1.4 | -20.2 | -4.9 | 8.8 | -0.1 |
| **Net transfer of resources (expenditure basis)** | **-12.6** | **-15.1** | **-8.6** | **-4.0** | **0.9** | **-5.1** | **4.6** | **8.7** | **29.4** | **31.5** | **23.3** |

Table A.26. *(continued)*
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Germany[e]** | | | | | | | | | | | |
| Net capital flow | -2.9 | -5.3 | -9.6 | -13.8 | -16.0 | -20.9 | -41.7 | -36.6 | -78.8 | -66.5 | -52.7 |
| Private grants[b] | -1.4 | -1.2 | -1.1 | -1.1 | -0.8 | -0.9 | -1.3 | -1.5 | -2.2 | -2.2 | -3.8 |
| Official grants | -6.8 | -5.9 | -6.2 | -5.5 | -6.4 | -6.4 | -7.8 | -10.7 | -11.7 | -12.2 | -15.3 |
| Direct investment[c] | -2.7 | -2.7 | -1.8 | -1.4 | -2.5 | -3.3 | -7.0 | -7.1 | -8.9 | -7.1 | -17.2 |
| Portfolio | 9.2 | 8.2 | -0.5 | 3.5 | 1.3 | 1.8 | 23.6 | -2.5 | -43.8 | -4.4 | 0.9 |
| Medium- and long-term loans | -2.6 | -1.1 | -3.8 | -5.1 | -4.3 | -1.9 | 0.1 | -3.6 | 4.0 | -0.3 | -18.8 |
| Short-term capital | 2.4 | -2.5 | 6.3 | -4.6 | -5.3 | -13.3 | -50.7 | -10.4 | -18.6 | -43.3 | -17.4 |
| Errors and omissions | -1.0 | -0.1 | -2.5 | 0.5 | 2.2 | 3.0 | 1.4 | -0.8 | 2.3 | 3.0 | 18.8 |
| Use of IMF credit | — | — | — | — | — | — | — | — | — | — | — |
| Net dividends and interest | 1.0 | -0.3 | -1.0 | 1.5 | 2.3 | 2.1 | 2.2 | 3.9 | 4.2 | 11.2 | 13.3 |
| Net transfer of resources (financial basis) | -1.9 | -5.6 | -10.6 | -12.4 | -13.6 | -18.8 | -39.5 | -32.6 | -74.6 | -55.3 | -39.4 |
| Use of official reserves[d] | 9.4 | 2.2 | -2.9 | 1.9 | 0.4 | -2.2 | -5.4 | -21.5 | 15.4 | -2.8 | -7.3 |
| **Net transfer of resources (expenditure basis)** | **7.5** | **-3.4** | **-13.5** | **-10.4** | **-13.3** | **-21.0** | **-44.9** | **-54.2** | **-59.2** | **-58.1** | **-46.6** |
| **Japan** | | | | | | | | | | | |
| Net capital flow | 14.5 | -2.5 | -12.9 | -20.8 | -34.4 | -51.4 | -73.1 | -52.8 | -67.2 | -74.0 | -49.1 |
| Private grants[b] | -0.2 | -0.2 | -0.1 | -0.2 | -0.1 | -0.3 | -0.6 | -1.0 | -1.1 | -1.0 | -1.0 |
| Official grants | -1.1 | -1.2 | -1.3 | -1.4 | -1.4 | -1.4 | -1.5 | -2.7 | -3.0 | -3.3 | -4.5 |
| Direct investment[c] | -2.1 | -4.7 | -4.1 | -3.2 | -6.0 | -5.8 | -14.3 | -18.4 | -34.7 | -45.2 | -46.2 |
| Portfolio | 9.4 | 7.7 | 0.8 | -2.9 | -24.0 | -41.8 | -102.0 | -91.3 | -52.8 | -32.5 | -14.7 |
| Medium- and long-term loans | -4.9 | -9.4 | -13.0 | -12.6 | -20.1 | -15.7 | -15.8 | -24.3 | -29.6 | -16.0 | 7.8 |
| Short-term capital | 16.5 | 4.9 | 0.1 | -2.6 | 13.4 | 9.7 | 58.6 | 88.6 | 50.9 | 45.8 | 30.4 |
| Errors and omissions | -3.1 | 0.4 | 4.7 | 2.1 | 3.7 | 3.8 | 2.5 | -3.7 | 3.1 | -21.8 | -20.9 |
| Use of IMF credit | — | — | — | — | — | — | — | — | — | — | — |
| Net dividends and interest | 0.9 | -0.8 | 1.7 | 3.1 | 4.2 | 6.8 | 9.5 | 16.7 | 21.0 | 23.4 | 23.2 |
| Net transfer of resources (financial basis) | 15.3 | -3.3 | -11.2 | -17.7 | -30.2 | -44.6 | -63.6 | -36.1 | -46.2 | -50.6 | -25.9 |
| Use of official reserves[d] | -5.3 | -3.9 | 4.7 | -1.6 | -2.1 | 0.6 | -14.8 | -37.9 | -16.5 | 12.8 | 7.8 |
| **Net transfer of resources (expenditure basis)** | **10.1** | **-7.2** | **-6.5** | **-19.3** | **-32.3** | **-44.0** | **-78.4** | **-74.0** | **-62.7** | **-37.8** | **-18.1** |
| **Other industrial countries** | | | | | | | | | | | |
| Net capital flow | 52.8 | 33.7 | 34.7 | 22.5 | 14.9 | 1.8 | -0.1 | 50.7 | 52.8 | 63.2 | .. |
| Private grants[b] | -0.6 | -0.6 | -0.3 | -0.5 | 0.2 | 0.1 | -0.7 | -0.4 | 0.2 | -0.6 | .. |
| Official grants | -2.2 | -3.3 | -5.2 | -3.6 | -3.4 | -2.9 | -7.2 | -7.0 | -7.2 | -9.1 | .. |
| Direct investment[c] | -2.2 | -9.3 | -0.3 | -1.5 | -4.2 | -11.2 | -9.4 | -11.2 | -8.7 | -14.8 | .. |
| Portfolio | 5.8 | 3.9 | 6.8 | 6.5 | 14.7 | 18.1 | 14.7 | 21.6 | 31.7 | 57.1 | .. |
| Medium- and long-term loans | 2.5 | 19.4 | 19.9 | 16.0 | 9.4 | 4.0 | 3.6 | 23.9 | 12.9 | 22.3 | .. |
| Short-term capital | 39.2 | 30.5 | 3.4 | 9.1 | 2.4 | 4.9 | 8.2 | 24.2 | 26.1 | 27.0 | .. |
| Errors and omissions | 11.1 | -6.5 | 9.9 | -3.6 | -4.5 | -11.3 | -8.8 | 0.5 | -1.8 | -18.8 | .. |
| Use of IMF credit | -0.8 | -0.4 | 0.6 | 0.3 | 0.2 | — | -0.4 | -0.8 | -0.5 | — | .. |
| Net dividends and interest | -11.5 | -22.5 | -26.5 | -27.9 | -30.3 | -29.9 | -34.5 | -38.0 | -46.5 | -53.6 | .. |
| Net transfer of resources (financial basis) | 41.3 | 11.3 | 8.2 | -5.3 | -15.5 | -28.1 | -34.6 | 12.7 | 6.2 | 9.6 | .. |
| Use of official reserves[d] | -13.6 | 9.0 | 2.3 | -15.2 | -15.7 | -0.2 | -3.6 | -38.3 | -27.6 | -20.4 | .. |
| **Net transfer of resources (expenditure basis)** | **27.7** | **20.3** | **10.5** | **-20.6** | **-31.2** | **-28.3** | **-38.2** | **-25.5** | **-21.4** | **-10.8** | **..** |

*Source*: UN/DIESA, based on data of IMF, OECD, and the World Bank and United Nations Secretariat estimates.

[a] Preliminary estimate.

[b] Excluding workers' remittances.

[c] Net of reinvested earnings.

[d] Additions to reserves are shown as negative numbers.

[e] Including transactions of the former German Democratic Republic as from July 1990.

Table A.27. Net transfer of financial resources of capital-importing developing countries, 1980-1990[a]
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *All countries* | | | | | |
| Transfer through direct investment | | | | | | | | | | | |
| Net investment flow | 5.8 | 9.7 | 7.1 | 6.2 | 6.2 | 7.4 | 5.9 | 9.3 | 14.5 | 15.9 | 16.5 |
| Net dividends and other income | -10.7 | -10.2 | -9.8 | -9.3 | -8.6 | -8.0 | -7.1 | -8.1 | -8.6 | -11.1 | -12.1 |
| Net transfer | -4.9 | -0.5 | -2.7 | -3.1 | -2.4 | -0.6 | -1.2 | 1.3 | 5.9 | 4.8 | 4.5 |
| Transfer through long-term foreign private borrowing | | | | | | | | | | | |
| Net credit flow | 35.4 | 48.3 | 41.0 | 26.8 | 18.5 | 12.5 | 7.6 | 2.1 | 7.6 | 3.6 | 2.4 |
| Interest paid | -24.1 | -31.2 | -37.2 | -35.5 | -40.3 | -39.2 | -34.8 | -33.8 | -39.4 | -32.6 | -32.2 |
| Net transfer | 11.3 | 17.2 | 3.8 | -8.7 | -21.8 | -26.7 | -27.2 | -31.7 | -31.8 | -29.1 | -29.8 |
| Transfer through short-term borrowing and domestic outflows[c] | | | | | | | | | | | |
| Net transfer | 5.0 | -12.5 | -27.5 | -18.9 | -13.7 | -9.3 | 0.5 | -2.3 | -10.4 | -3.4 | 1.2 |
| Transfer through private grants (net) | 1.7 | 1.8 | 1.7 | 2.1 | 2.6 | 2.9 | 3.8 | 4.1 | 4.8 | 3.4 | 3.3 |
| Transfer through official flows | | | | | | | | | | | |
| Official transfers (grants) | 11.2 | 11.9 | 9.2 | 10.1 | 10.8 | 11.8 | 11.2 | 12.6 | 12.8 | 13.4 | 17.8 |
| Net official credits | 23.4 | 28.6 | 31.3 | 27.6 | 25.5 | 16.9 | 16.6 | 13.7 | 15.9 | 16.6 | 27.4 |
| Interest paid | -5.8 | -6.7 | -8.2 | -9.6 | -11.1 | -12.7 | -15.6 | -16.8 | -18.3 | -18.3 | -22.6 |
| Net transfer | 28.8 | 33.7 | 32.3 | 28.2 | 25.2 | 15.9 | 12.2 | 9.5 | 10.5 | 11.7 | 22.6 |
| Total net transfer (financial basis) | 41.9 | 39.7 | 7.6 | -0.6 | -10.2 | -17.8 | -11.9 | -19.1 | -21.0 | -12.6 | 1.7 |
| Use of official reserves[d] | -14.7 | 3.0 | 19.2 | -6.3 | -18.8 | 1.2 | 8.3 | -14.1 | -10.6 | -14.6 | -23.4 |
| **Total net transfer (expenditure basis)** | **27.2** | **42.7** | **26.8** | **-6.9** | **-29.0** | **-16.6** | **-3.6** | **-33.2** | **-31.6** | **-27.1** | **-21.7** |
| | | | | | | *Sub-Saharan Africa* | | | | | |
| Grants | | | | | | | | | | | |
| Private | -0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 | 0.7 |
| Official | 3.1 | 3.1 | 2.7 | 2.9 | 3.0 | 3.5 | 3.9 | 4.9 | 5.0 | 5.1 | 5.5 |
| Net direct investment | -0.4 | -0.4 | -0.9 | -0.3 | -0.6 | -0.5 | -0.6 | -0.5 | -0.6 | -0.8 | -0.2 |
| Foreign official credit | 3.6 | 4.8 | 4.3 | 4.1 | 2.3 | 1.4 | 1.6 | 2.2 | 2.1 | 1.8 | 3.2 |
| Foreign private credit[e] | 1.9 | 0.2 | 1.3 | — | -0.3 | -0.6 | -0.4 | -0.6 | — | -0.1 | 0.5 |
| Short-term borrowing and domestic outflows[c] | -0.4 | 1.4 | -0.9 | -1.1 | -2.3 | -0.5 | -0.9 | -0.1 | 0.7 | -1.5 | -1.2 |
| Total net transfer (financial basis) | 7.6 | 9.3 | 7.2 | 5.9 | 2.6 | 4.0 | 5.9 | 6.7 | 8.0 | 5.1 | 8.5 |
| Use of official reserves[d] | 0.3 | -0.1 | 0.2 | -0.4 | -0.3 | -0.8 | -0.5 | -0.5 | -0.6 | 1.0 | 0.5 |
| **Total net transfer (expenditure basis)** | **7.9** | **9.2** | **7.4** | **5.5** | **2.3** | **3.2** | **5.4** | **6.2** | **7.5** | **6.1** | **9.0** |
| | | | | | | *Fifteen heavily indebted countries* | | | | | |
| Grants | | | | | | | | | | | |
| Private | 0.7 | 0.8 | 0.6 | 0.7 | 0.9 | 1.0 | 1.1 | 1.3 | 1.4 | 1.6 | 1.7 |
| Official | 1.0 | 1.1 | 0.7 | 0.7 | 0.8 | 1.3 | 0.9 | 1.2 | 1.3 | 1.5 | 1.7 |
| Net direct investment | -1.0 | 1.9 | 0.2 | -0.5 | -0.5 | 0.3 | -1.7 | 0.7 | 2.5 | -0.3 | 0.6 |
| Foreign official credit | 2.6 | 3.7 | 6.5 | 4.8 | 5.5 | 0.2 | -0.2 | -2.7 | -3.8 | -4.8 | 6.2 |
| Foreign private credit[e] | 6.4 | 15.1 | 1.1 | -12.2 | -22.3 | -26.0 | -25.4 | -21.5 | -27.1 | -21.2 | -17.0 |
| Short-term borrowing and domestic outflows[c] | 6.2 | -9.4 | -23.0 | -18.4 | -11.5 | -14.9 | -1.9 | -2.4 | -7.9 | -9.5 | -11.4 |
| Total net transfer (financial basis) | 16.0 | 13.2 | -13.9 | -24.8 | -27.2 | -38.1 | -27.3 | -23.5 | -33.7 | -32.7 | -18.2 |
| Use of official reserves[d] | -7.3 | 7.2 | 23.3 | 1.1 | -13.4 | -2.5 | 5.2 | -4.9 | 2.7 | -3.5 | -11.5 |
| **Total net transfer (expenditure basis)** | **8.7** | **20.4** | **9.4** | **-23.8** | **-40.6** | **-40.6** | **-22.1** | **-28.4** | **-31.0** | **-36.2** | **-29.7** |

*Source*: UN/DIESA, based on data of IMF, OECD and the World Bank and United Nations Secretariat estimates.

*Note*: Direct investment is net of reinvested earnings (cash flow approach); official credits include use of IMF credit; interest includes IMF charges; private grants include net flow of gifts from overseas residents (excluding workers' remittances) and grants by non-governmental organizations.

[a] Sample of 93 countries.

[b] Preliminary estimate.

[c] Calculated as a residual (including short-term trade financing, normal and unusual outflows ("capital flight"), arrears of interest due and other flows captured in balance-of-payments data as errors and omissions and presumed to be financial flows).

[d] Additions to reserves are shown as negative numbers.

[e] Medium- and long-term foreign borrowing.

Table A.28. Official reserves and coverage of current expenditures of capital-importing developing countries, 1980-1990

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *Billions of dollars* | | | | | |
| **Level of reserves[b]** | | | | | | | | | | | |
| All countries | 113.9 | 111.0 | 100.8 | 109.3 | 127.5 | 139.0 | 157.1 | 207.2 | 209.0 | 228.1 | 271.5 |
| Energy exporters | 44.5 | 39.8 | 28.8 | 31.3 | 36.4 | 38.9 | 33.0 | 42.1 | 29.1 | 34.7 | 52.3 |
| Energy importers | 66.3 | 65.7 | 60.1 | 62.5 | 73.2 | 86.9 | 112.1 | 148.2 | 160.8 | 174.8 | 188.9 |
| Recent surplus countries | 11.9 | 17.6 | 20.0 | 23.6 | 29.0 | 38.5 | 62.8 | 96.0 | 104.0 | 109.4 | 112.8 |
| Other | 54.5 | 48.1 | 40.2 | 38.9 | 44.2 | 48.4 | 49.3 | 52.3 | 56.9 | 65.4 | 76.1 |
| China | 3.1 | 5.6 | 11.8 | 15.5 | 17.8 | 13.2 | 12.0 | 16.9 | 19.1 | 18.5 | 30.2 |
| Memo item: | | | | | | | | | | | |
| Fifteen heavily indebted countries | 50.0 | 41.7 | 26.3 | 27.5 | 39.6 | 40.9 | 34.4 | 38.7 | 33.5 | 37.9 | 51.4 |
| Sub-Saharan Africa[c] | 3.4 | 3.1 | 2.6 | 3.0 | 3.1 | 4.1 | 5.1 | 5.9 | 6.4 | 7.1 | 6.6 |
| | | | | | | *Number of months* | | | | | |
| **Coverage of current expenditures[d]** | | | | | | | | | | | |
| All countries | 2.7 | 2.2 | 1.9 | 2.3 | 2.7 | 2.7 | 2.6 | 2.8 | 2.5 | 2.6 | 3.1 |
| Energy exporters | 3.2 | 2.4 | 1.8 | 2.4 | 2.7 | 3.0 | 2.9 | 3.5 | 2.1 | 2.3 | 3.0 |
| Energy importers | 2.4 | 2.0 | 2.0 | 2.2 | 2.7 | 2.7 | 2.6 | 2.5 | 2.7 | 2.7 | 3.1 |
| Memo item: | | | | | | | | | | | |
| Fifteen heavily indebted countries | 3.1 | 2.3 | 1.6 | 2.1 | 3.0 | 3.2 | 2.7 | 2.9 | 2.2 | 2.4 | 2.8 |
| Sub-Saharan Africa[c] | 1.1 | 1.0 | 0.9 | 1.1 | 1.1 | 1.5 | 1.7 | 1.8 | 1.8 | 2.0 | 1.7 |

*Source*: UN/DIESA, based on data of IMF and national estimates.

[a] Partly estimated.

[b] Total reserves, end of period (with gold valued at SDR 35 per ounce).

[c] Excluding Nigeria.

[d] Expenditures on goods and services (including interest payments) for given year relative to total reserves at end of year, sample of 93 countries.

Table A.29. Net IMF lending to developing countries, by facility, 1980-1990
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Regular facilities | 2.3 | 6.2 | 4.2 | 8.4 | 4.4 | 1.1 | 0.1 | -3.8 | -4.0 | -3.0 | -1.6 |
| Credit tranche drawings | 1.5 | 3.9 | 1.9 | 3.5 | 1.2 | 1.1 | 1.0 | -1.8 | -1.2 | -1.5 | -2.8 |
| External facility drawings | 0.7 | 2.4 | 2.3 | 4.9 | 3.2 | - | -0.9 | -1.9 | -2.8 | -1.4 | 1.1 |
| Special facilities | 1.2 | 0.4 | 1.4 | 2.3 | -0.2 | -0.8 | -2.1 | -1.0 | -0.5 | 1.0 | -0.6 |
| Buffer stock financing | - | - | 0.1 | 0.3 | - | -0.2 | -0.2 | -0.1 | - | - | - |
| Compensatory financing | 0.3 | 0.7 | 1.7 | 2.1 | - | -0.4 | -1.4 | -0.7 | -0.4 | 0.2 | -0.8 |
| Oil facility | -0.7 | -0.7 | -0.4 | -0.1 | - | - | - | - | - | - | - |
| 1970s Trust Fund | 1.6 | 0.4 | - | - | -0.2 | -0.3 | -0.6 | -0.7 | -0.7 | -0.5 | -0.4 |
| Structural adjustment facility | - | - | - | - | - | - | 0.1 | 0.5 | 0.3 | 0.6 | 0.1 |
| Enhanced structural adjustment facility | - | - | - | - | - | - | - | - | 0.3 | 0.7 | 0.5 |
| **Total** | **3.4** | **6.6** | **5.7** | **10.6** | **4.2** | **0.2** | **-2.0** | **-4.7** | **-4.5** | **-2.1** | **-2.3** |
| Memo item: | | | | | | | | | | | |
| Selected characteristics of higher conditionality lending agreements | | | | | | | | | | | |
| Number initiated during year | 28 | 31 | 19 | 33 | 20 | 26 | 31 | 25 | 28 | 23 | 13 |
| Average length (months) | 20 | 23 | 14 | 18 | 14 | 16 | 22 | 26 | 25 | 25 | 19 |
| Total amount committed | 7.5 | 24.4 | 2.6 | 15.7 | 4.0 | 3.4 | 4.0 | 4.4 | 5.4 | 13.8 | 1.9 |

*Sources*: IMF, *International Financial Statistics Monthly*, and *IMF Survey*.

Table A.30. Funds raised on international credit markets, 1981-1990
(Billions of dollars)

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|
| **World total** | **200.6** | **179.1** | **157.8** | **228.8** | **279.1** | **321.4** | **303.7** | **371.9** | **385.3** | **353.2** |
| Grouped by borrower: | | | | | | | | | | |
| Developed market economies | 137.2 | 123.2 | 113.3 | 182.5 | 231.3 | 285.2 | 260.3 | 330.3 | 345.0 | 310.0 |
| Eastern Europe and the USSR | 1.6 | 0.7 | 1.1 | 3.4 | 5.3 | 3.9 | 3.7 | 4.3 | 4.7 | 4.6 |
| Developing countries | 55.1 | 46.7 | 35.8 | 33.1 | 29.3 | 22.2 | 27.8 | 26.8 | 22.7 | 23.6 |
| Multilateral institutions | 6.7 | 8.5 | 7.7 | 9.8 | 13.2 | 10.1 | 11.9 | 10.5 | 12.9 | 15.0 |
| Grouped by instrument: | | | | | | | | | | |
| Bonds | 52.8 | 75.5 | 77.1 | 111.5 | 169.1 | 228.1 | 180.8 | 229.7 | 255.8 | 228.8 |
| International bonds | 31.3 | 50.3 | 50.1 | 81.4 | 136.5 | 187.7 | 140.5 | 178.9 | 212.9 | 181.9 |
| Foreign and special placements | 21.5 | 25.2 | 27.0 | 30.1 | 32.5 | 40.4 | 40.3 | 50.8 | 42.9 | 46.9 |
| Loans | 147.7 | 103.6 | 80.7 | 117.3 | 110.1 | 93.3 | 122.9 | 142.2 | 129.5 | 124.5 |
| Bank loans | 94.6 | 98.2 | 67.2 | 62.0 | 61.1 | 63.2 | 91.7 | 125.6 | 121.2 | 118.2 |
| Other facilities | 53.1 | 5.4 | 13.5 | 55.3 | 48.9 | 30.0 | 31.2 | 16.6 | 8.4 | 6.3 |

*Source*: OECD, *Financial Statistics Monthly.*

Table A.31. Net ODA from major sources, by type, 1981-1989
(Millions of dollars and percentages)

| Donor group and country | Growth rate of ODA (1988 prices and exchange rates) | | ODA as percentage of GNP | Total ODA (billions of dollars) | Percentage distribution of ODA by type, 1989 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Bilateral | | | Multilateral | | |
| | 1981-1985 | 1986-1989 | 1989 | 1989 | Grants[a] | Technical cooperation | Loans | United Nations | IDA | Other |
| Total ODA | 1.7 | 1.4 | .. | 53.2 | | 76.3[b] | | | 23.7[c] | |
| Total DAC countries | 2.9 | 1.6 | 0.33 | 46.5 | 58.7 | 22.1 | 14.5 | 7.3 | 7.0 | 12.5 |
| Total EC | 3.9 | 3.6 | 0.51 | 22.3 | 55.6 | 26.6 | 13.0 | 5.2 | 8.8 | 17.5 |
| of which: | | | | | | | | | | |
| France | 5.6 | 3.8 | 0.78 | 7.4 | 63.9 | 35.0 | 18.4 | 1.5 | 4.1 | 12.1 |
| Germany | 2.6 | -1.0 | 0.41 | 4.9 | 47.5 | 29.7 | 16.2 | 4.4 | 10.3 | 21.6 |
| Italy | 13.4 | 16.6 | 0.42 | 3.6 | 42.5 | 9.8 | 17.9 | 6.7 | 14.2 | 18.7 |
| Netherlands | -0.6 | 3.6 | 0.93 | 2.1 | 65.6 | 30.8 | 6.6 | 9.4 | 7.1 | 11.3 |
| United Kingdom | 1.3 | 0.7 | 0.31 | 2.6 | 59.8 | 23.5 | -3.3 | 7.3 | 11.1 | 25.0 |
| Denmark | 3.5 | 5.4 | 0.94 | 0.9 | 55.7 | 10.9 | 0.1 | 19.9 | 5.9 | 18.5 |
| Belgium | 2.4 | -1.2 | 0.46 | 0.7 | 45.3 | 21.7 | 5.3 | 1.8 | 21.0 | 26.6 |
| Ireland | 8.4 | -5.6 | 0.17 | 0.1 | 38.8 | 22.4 | - - | 8.2 | 10.2 | 42.9 |
| Australia | 4.0 | -3.1 | 0.37 | 1.0 | 69.3 | 20.8 | - - | 8.4 | 8.9 | 13.4 |
| Austria | 12.1 | -10.0 | 0.22 | 0.3 | 37.6 | 16.1 | 33.3 | 7.9 | 11.1 | 10.0 |
| Canada | 5.4 | 1.3 | 0.44 | 2.3 | 68.8 | 10.6 | -0.7 | 11.8 | 7.3 | 12.8 |
| Finland | 15.8 | 16.8 | 0.62 | 0.7 | 55.5 | 9.5 | 5.5 | 20.9 | 5.2 | 12.9 |
| Japan | 2.0 | 7.1 | 0.31 | 8.9 | 33.9 | 12.8 | 41.5 | 5.6 | 8.7 | 10.2 |
| New Zealand | -2.5 | -3.3 | 0.22 | 0.1 | 88.4 | 25.6 | - - | 2.3 | - - | 9.3 |
| Norway | 5.9 | 4.0 | 1.04 | 0.9 | 60.6 | 9.4 | -0.1 | 24.7 | 7.1 | 7.7 |
| Sweden | 3.5 | 5.5 | 0.95 | 1.8 | 72.4 | 17.9 | -2.1 | 16.4 | 7.0 | 6.3 |
| Switzerland | 7.3 | 2.0 | 0.30 | 0.6 | 70.5 | 11.5 | 5.4 | 16.4 | - - | 7.7 |
| United States | 0.5 | -8.1 | 0.15 | 7.6 | 88.6 | 28.0 | 0.3 | 8.0 | - - | 3.2 |
| Total non-DAC OECD | .. | .. | 0.08 | 0.4 | .. | .. | .. | .. | .. | .. |
| Arab countries | -16.5 | -27.2 | 0.54 | 1.5 | | 88.9[b] | | 0.2 | 0.05 | 8.6 |
| Saudi Arabia | .. | .. | 1.46 | 1.2 | | 94.8[b] | | 2.2 | - - | 3.0 |
| Kuwait | .. | .. | 0.54 | 0.2 | | 87.3[b] | | 0.9 | 4.9 | 6.9 |
| United Arab Emirates | .. | .. | 0.10 | - - | | 96.0[b] | | 0.2 | - - | 0.2 |
| Other | .. | .. | .. | 0.2 | | 46.7[b] | | 0.1 | - - | 58.2 |
| Other developing countries | .. | .. | 0.03[d] | 0.5 | .. | .. | .. | .. | .. | .. |
| Eastern Europe and the Soviet Union | .. | .. | .. | 4.3 | | 98.9[b] | | | 1.1[c] | |

*Source*: UNCTAD calculations, based on OECD, *Development Co-operation*, various issues.

[a] Including technical cooperation.

[b] Total bilateral: grants, technical cooperation and loans.

[c] Total multilateral: United Nations, IDA and "other".

[d] 1988 figures.

Table A.32. Regional distribution of ODA from major sources, 1980-1989
(Billions of dollars and percentage)

| Donor and donor group | All developing countries | | Latin America | | Africa | | West Asia | | South and East Asia | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1980-1981 | 1988-1989 | 1980-1981 | 1988-1989 | 1980-1981 | 1988-1989 | 1980-1981 | 1988-1989 | 1980-1981 | 1988-1989 |
| **Total ODA (billions of dollars)** | **63.1** | **88.2** | **7.4** | **12.5** | **21.9** | **36.3** | **12.2** | **5.7** | **21.6** | **33.8** |
| Percentage share of: | | | | | | | | | | |
| DAC countries, bilateral | 51.1 | 65.3 | 58.5 | 69.7 | 62.5 | 69.4 | 29.9 | 75.3 | 49.0 | 57.5 |
| Australia | 1.6 | 1.4 | -- | -- | 0.3 | 0.3 | -- | 0.1 | 4.2 | 3.4 |
| Austria | 0.6 | 0.4 | 0.2 | 0.1 | 0.5 | 0.3 | 0.9 | 1.4 | 0.6 | 0.3 |
| Belgium | 1.2 | 0.7 | 0.5 | 0.4 | 2.7 | 1.4 | 0.2 | 0.2 | 0.6 | 0.1 |
| Canada | 1.7 | 2.4 | 1.8 | 3.0 | 2.3 | 2.7 | 0.2 | 0.6 | 2.0 | 2.1 |
| Denmark | 0.6 | 1.0 | 0.1 | 0.2 | 1.1 | 1.6 | 0.1 | 0.5 | 0.7 | 0.7 |
| Finland | 0.2 | 0.8 | 0.1 | 0.4 | 0.4 | 1.3 | -- | 0.2 | 0.1 | 0.4 |
| France | 10.4 | 12.2 | 21.9 | 16.9 | 17.5 | 17.7 | 1.1 | 3.8 | 4.6 | 6.1 |
| Germany | 6.5 | 6.3 | 8.3 | 6.6 | 7.1 | 7.2 | 7.5 | 12.0 | 4.7 | 4.3 |
| Ireland | -- | -- | -- | -- | 0.1 | 0.1 | -- | -- | -- | -- |
| Italy | 0.3 | 4.7 | 0.3 | 5.7 | 0.7 | 7.8 | 0.1 | 1.2 | -- | 1.5 |
| Japan | 6.5 | 13.9 | 4.0 | 7.7 | 3.1 | 6.6 | 1.1 | 8.8 | 13.9 | 24.9 |
| Netherlands | 3.3 | 3.0 | 7.7 | 4.1 | 3.4 | 3.1 | 0.4 | 1.4 | 3.4 | 2.8 |
| New Zealand | 0.2 | 0.1 | -- | -- | -- | -- | -- | -- | 0.4 | 0.3 |
| Norway | 0.7 | 1.1 | 0.2 | 0.7 | 1.3 | 1.7 | 0.1 | -- | 0.7 | 0.6 |
| Sweden | 1.5 | 2.0 | 0.7 | 1.7 | 2.9 | 3.0 | 0.1 | 0.2 | 1.3 | 1.4 |
| Switzerland | 0.4 | 0.8 | 0.5 | 0.9 | 0.6 | 1.0 | 0.1 | 0.4 | 0.4 | 0.6 |
| United Kingdom | 3.5 | 2.6 | 1.8 | 1.4 | 4.2 | 3.7 | 0.9 | 0.4 | 4.8 | 2.3 |
| United States | 11.8 | 11.8 | 10.4 | 19.6 | 14.4 | 9.9 | 17.0 | 44.1 | 6.6 | 5.7 |
| Multilateral | 22.0 | 23.5 | 24.0 | 15.9 | 23.8 | 28.4 | 6.4 | 8.6 | 28.6 | 23.5 |
| Arab countries | 17.7 | 1.0 | 0.2 | -- | 12.9 | 1.0 | 61.6 | 10.9 | 3.8 | -0.3 |
| Eastern Europe and the Soviet Union | 9.1 | 10.2 | 17.3 | 14.3 | 0.8 | 1.3 | 2.2 | 5.1 | 18.5 | 19.2 |
| Total ODA | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Source*: UNCTAD calculations, based on data supplied by OECD.

Table A.33. Resource commitments of multilateral development institutions, 1980-1990[a]
(Millions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Financial institutions** | 17583 | 18668 | 18339 | 22036 | 20300 | 23809 | 24960 | 26640 | 27655 | 32362 | 34814 |
| African Development Bank | 571 | 636 | 766 | 899 | 897 | 1154 | 1640 | 2140 | 2176 | 2856 | 3300 |
| Asian Development Bank | 1452 | 1694 | 1702 | 1922 | 2257 | 1845 | 2044 | 2508 | 3241 | 3761 | 4099 |
| Caribbean Development Bank | 45 | 42 | 45 | 48 | 65 | 50 | 67 | 41 | 74 | 77 | 101 |
| Inter-American Development Bank | 2341 | 2534 | 2793 | 3099 | 3615 | 3102 | 3057 | 2408 | 1738 | 2679 | 3 938 |
| of which: | | | | | | | | | | | |
| Inter-American Investment Corporation | | | | | | | | | | 6 | 66 |
| International Fund for Agricultural Development | 394 | 377 | 338 | 282 | 211 | 131 | 147 | 233 | 244 | 277 | 323 |
| World Bank Group: | 12780 | 13385 | 12695 | 15786 | 13255 | 17527 | 18005 | 19310 | 20182 | 22765 | 23043 |
| International Bank for Reconstruction and Development | 8148 | 8905 | 9398 | 11721 | 9448 | 12952 | 13593 | 14066 | 14411 | 16251 | 15176 |
| International Development Association | 3817 | 3688 | 2832 | 3112 | 3222 | 3541 | 3373 | 3841 | 4350 | 4924 | 6300 |
| International Finance Corporation | 815 | 792 | 465 | 953 | 585 | 1034 | 1039 | 1403 | 1421 | 1590 | 1567 |
| **Operational agencies of the United Nations** | 1735 | 1839 | 1947 | 1722 | 2028 | 2032 | 1933 | 2242 | 2763 | 2851 | 3012 |
| United Nations Development Programme[b] | 639 | 696 | 621 | 527 | 531 | 567 | 656 | 809 | 942 | 1063 | 1111 |
| United Nations Population Fund | 146 | 127 | 115 | 117 | 134 | 141 | 116 | 134 | 169 | 194 | 211 |
| United Nations Children's Fund | 279 | 295 | 405 | 182 | 204 | 452 | 248 | 330 | 454 | 498 | 545 |
| World Food Programme | 671 | 721 | 806 | 896 | 1159 | 872 | 913 | 969 | 1198 | 1096 | 1145 |
| **Total commitments** | **19318** | **20507** | **20286** | **23758** | **22328** | **25841** | **26893** | **28882** | **30418** | **35272** | **37882** |
| Memo item: | | | | | | | | | | | |
| Commitments in units of 1980 purchasing power[c] | 19318 | 21816 | 22050 | 26694 | 25963 | 30048 | 26110 | 24898 | 24531 | 28676 | 27854 |

*Source*: Annual reports and information supplied by individual institutions.

[a] Loans, grants, technical assistance and equity participation, as appropriate; all data are on a calendar-year basis.

[b] Including UNDP-administered funds.

[c] Total commitments deflated by the United Nations index of manufactured export prices in dollars of developed market economies, 1980=100.

Table A.34. External debt of capital-importing developing countries, 1980-1990
(Billions of dollars)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *All countries*[b] | | | | | |
| Long-term debt | 441.9 | 512.5 | 580.8 | 674.4 | 715.5 | 795.8 | 896.4 | 1 006.5 | 987.9 | 979.3 | 1 032.2 |
| Concessional | 107.8 | 114.6 | 122.5 | 130.6 | 133.4 | 154.0 | 181.5 | 214.6 | 223.4 | 230.3 | .. |
| Bilateral | 83.4 | 87.0 | 91.6 | 96.6 | 96.5 | 111.8 | 133.5 | 158.2 | 163.6 | 165.0 | .. |
| Multilateral[c] | 24.4 | 27.6 | 31.0 | 34.0 | 36.9 | 42.2 | 48.1 | 56.4 | 59.8 | 65.3 | .. |
| Official, non-concessional | 74.2 | 92.5 | 110.2 | 135.2 | 147.5 | 179.6 | 218.4 | 262.7 | 251.0 | 256.0 | .. |
| Bilateral | 38.4 | 45.7 | 51.1 | 60.2 | 68.7 | 79.1 | 93.9 | 112.3 | 108.7 | 112.7 | .. |
| Multilateral | 26.9 | 32.3 | 39.4 | 45.9 | 47.8 | 65.0 | 86.7 | 111.9 | 110.1 | 114.6 | .. |
| IMF | 8.9 | 14.5 | 19.7 | 29.0 | 31.0 | 35.4 | 37.8 | 38.5 | 32.1 | 28.6 | 32.1 |
| Private | 259.9 | 305.4 | 348.1 | 408.5 | 434.6 | 462.3 | 496.6 | 529.2 | 513.5 | 493.1 | 475.8 |
| Short-term debt | 125.3 | 148.4 | 163.8 | 137.1 | 129.9 | 129.0 | 124.0 | 141.9 | 150.3 | 164.0 | 181.1 |
| **Total external debt** | **567.2** | **660.9** | **744.6** | **811.5** | **845.4** | **924.8** | **1 020.4** | **1 148.4** | **1 138.2** | **1 143.3** | **1 213.3** |
| | | | | | | *Fifteen heavily indebted countries* | | | | | |
| Long-term debt | 204.7 | 245.9 | 280.6 | 341.2 | 366.8 | 393.2 | 434.1 | 476.4 | 452.1 | 436.7 | 441.6 |
| Concessional | 14.4 | 15.1 | 15.5 | 15.4 | 15.2 | 18.1 | 22.3 | 24.5 | 24.5 | 24.8 | .. |
| Bilateral | 12.2 | 12.8 | 13.2 | 13.1 | 12.8 | 15.4 | 19.4 | 21.3 | 21.3 | 21.5 | .. |
| Multilateral[c] | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.7 | 2.9 | 3.2 | 3.2 | 3.3 | .. |
| Official, non-concessional | 25.1 | 29.8 | 35.8 | 48.0 | 56.0 | 72.1 | 95.4 | 121.4 | 119.9 | 126.2 | .. |
| Bilateral | 9.0 | 10.3 | 10.9 | 14.4 | 18.8 | 23.0 | 33.0 | 44.5 | 47.1 | 53.1 | .. |
| Multilateral | 13.1 | 15.5 | 19.0 | 21.8 | 23.0 | 31.4 | 42.9 | 55.8 | 54.1 | 55.6 | .. |
| IMF | 3.0 | 3.9 | 5.9 | 11.8 | 14.2 | 17.7 | 19.5 | 21.2 | 18.7 | 17.5 | 23.5 |
| Private | 165.2 | 201.1 | 229.3 | 277.7 | 295.6 | 303.0 | 316.5 | 330.5 | 307.7 | 285.8 | 264.1 |
| Short-term debt | 79.9 | 99.7 | 105.3 | 74.8 | 64.2 | 56.6 | 41.3 | 45.8 | 50.5 | 60.2 | 66.2 |
| **Total external debt** | **284.6** | **345.6** | **385.9** | **416.0** | **431.0** | **449.8** | **475.4** | **522.2** | **502.6** | **496.9** | **507.8** |
| | | | | | | *Sub-Saharan Africa* | | | | | |
| Long-term debt | 41.1 | 45.7 | 50.6 | 55.0 | 57.7 | 68.2 | 80.1 | 95.7 | 96.4 | 98.9 | 111.4 |
| Concessional | 14.5 | 16.6 | 18.7 | 20.4 | 22.2 | 26.5 | 31.8 | 39.2 | 41.9 | 44.2 | .. |
| Bilateral | 10.2 | 11.4 | 12.5 | 13.2 | 14.1 | 16.7 | 19.5 | 23.3 | 24.4 | 24.6 | .. |
| Multilateral[c] | 4.3 | 5.2 | 5.7 | 7.2 | 8.1 | 9.8 | 12.3 | 15.9 | 17.5 | 19.6 | .. |
| Official, non-concessional | 11.6 | 13.6 | 15.1 | 18.7 | 19.5 | 23.7 | 28.7 | 35.3 | 34.2 | 34.4 | .. |
| Bilateral | 5.9 | 6.2 | 6.7 | 8.7 | 9.4 | 11.6 | 14.8 | 18.7 | 18.6 | 19.4 | .. |
| Multilateral | 2.7 | 3.0 | 3.5 | 4.0 | 4.1 | 5.4 | 6.9 | 9.0 | 8.6 | 8.6 | .. |
| IMF | 3.0 | 4.4 | 4.9 | 6.0 | 6.0 | 6.7 | 7.0 | 7.6 | 7.0 | 6.4 | 6.4 |
| Private | 15.0 | 15.6 | 16.8 | 16.0 | 15.9 | 18.0 | 19.6 | 21.2 | 20.3 | 20.4 | 21.5 |
| Short-term debt | 6.2 | 6.4 | 6.7 | 6.3 | 7.2 | 8.7 | 9.7 | 11.9 | 13.2 | 15.2 | 15.0 |
| **Total external debt** | **47.3** | **52.1** | **57.3** | **61.3** | **64.9** | **76.9** | **89.8** | **107.6** | **109.6** | **114.1** | **126.4** |

*Source*: UN/DIESA, based on data of IMF, OECD and the World Bank.

[a] Estimate.

[b] Debt of 119 economies, drawn primarily from the data of the Debtor Reporting System of the World Bank (104 countries). For non-reporting countries, data are drawn from the Creditor Reporting System of OECD (15 economies), excluding, however, non-guaranteed bank debt of offshore financial centres, much of which is not the debt of the local economies. Also excluded from the creditor-reported data are those published by the Soviet Union for 1988. Without a longer time series, inclusion of those data would introduce a sharp discontinuity in 1988. Furthermore, their inclusion would raise the debt of Afghanistan, Angola, Cambodia, Cuba and Viet Nam by $28 billion in 1989.

[c] Including concessional facilities of IMF.

Table A.35. Debt indicators and debt-service payments for capital-importing developing countries, 1980-1990

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *Debt indicators* (percentage) | | | | | | |
| **Ratio of external debt to GNP** | | | | | | | | | | | |
| All countries | 26.4 | 28.9 | 33.5 | 37.6 | 37.8 | 40.2 | 42.6 | 44.0 | 38.8 | 35.2 | 37.3 |
| of which: | | | | | | | | | | | |
| Fifteen heavily indebted countries | 32.1 | 35.6 | 44.0 | 55.1 | 55.8 | 57.6 | 60.8 | 65.5 | 55.8 | 48.9 | 51.7 |
| Sub-Saharan Africa | 44.9 | 53.2 | 59.5 | 64.2 | 71.5 | 84.9 | 84.0 | 97.9 | 94.5 | 93.5 | 102.3 |
| **Ratio of external debt to exports** | | | | | | | | | | | |
| All countries | 119.5 | 130.2 | 154.6 | 169.0 | 159.7 | 176.8 | 195.2 | 183.1 | 154.5 | 140.3 | 138.4 |
| of which: | | | | | | | | | | | |
| Fifteen heavily indebted countries | 168.5 | 200.2 | 251.4 | 287.0 | 271.0 | 288.7 | 342.9 | 334.6 | 287.3 | 262.6 | 248.4 |
| Sub-Saharan Africa | 157.2 | 190.7 | 222.7 | 247.3 | 244.3 | 294.7 | 326.3 | 357.3 | 367.6 | 365.2 | 363.6 |
| **Ratio of debt-service to exports** | | | | | | | | | | | |
| All countries | 18.6 | 20.9 | 23.7 | 22.4 | 21.6 | 23.0 | 23.4 | 21.0 | 19.2 | 15.9 | 15.8 |
| of which: | | | | | | | | | | | |
| 15 heavily-indebted countries | 31.3 | 37.0 | 44.9 | 40.8 | 39.2 | 37.0 | 40.8 | 34.8 | 36.5 | 29.1 | 26.7 |
| sub-Saharan Africa | 17.1 | 19.9 | 20.8 | 22.4 | 22.3 | 25.6 | 28.7 | 25.0 | 25.4 | 22.5 | 24.5 |
| | | | | | *Debt-service payments* (billions of dollars) | | | | | | |
| **All countries** | | | | | | | | | | | |
| Total debt-service | 89.5 | 107.5 | 115.4 | 109.3 | 116.6 | 122.7 | 126.2 | 136.5 | 145.8 | 134.3 | 138.8 |
| Interest payments | 45.6 | 60.1 | 67.2 | 64.2 | 68.2 | 67.9 | 63.4 | 62.9 | 72.4 | 65.9 | 66.6 |
| of which: non-concessional | 43.6 | 57.7 | 65.4 | 62.5 | 66.6 | 65.8 | 60.7 | 59.9 | 69.1 | 57.6 | .. |
| **Fifteen heavily indebted countries** | | | | | | | | | | | |
| Total debt-service | 52.9 | 63.9 | 68.9 | 59.1 | 62.3 | 57.7 | 56.6 | 54.3 | 63.9 | 55.1 | 54.3 |
| Interest payments | 27.9 | 37.9 | 43.1 | 39.6 | 41.6 | 39.8 | 34.3 | 32.6 | 38.8 | 31.3 | 28.7 |
| of which: non-concessional | 27.5 | 37.6 | 42.8 | 39.2 | 41.3 | 39.5 | 34.0 | 32.3 | 38.5 | 31.0 | .. |
| **Sub-Saharan Africa** | | | | | | | | | | | |
| Total debt-service | 5.1 | 5.4 | 5.3 | 5.5 | 5.9 | 6.7 | 7.9 | 7.5 | 7.6 | 7.0 | 7.9 |
| Interest payments | 2.4 | 2.7 | 2.8 | 2.6 | 2.8 | 3.0 | 3.2 | 2.9 | 3.0 | 2.8 | 3.1 |
| of which: non-concessional | 2.1 | 2.5 | 2.5 | 1.6 | 2.7 | 2.8 | 2.9 | 2.6 | 2.6 | 2.4 | .. |

*Source*: UN/DIESA, based on data of IMF, OECD and the World Bank.

[a] Preliminary estimate.

Table A.36. Debt restructuring with official creditors, 1982-1990

| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|
| **Number of agreements** | | | | | | | | | |
| Developing countries, total | 5 | 15 | 14 | 22 | 19 | 17 | 15 | 24 | 17 |
| Middle-income countries | - | 4 | 2 | 9 | 3 | 4 | 3 | 5 | 2 |
| Lower-middle-income countries | - | 3 | 5 | 4 | 6 | 5 | 3 | 5 | 6 |
| Low-income countries | 5 | 8 | 7 | 9 | 10 | 7 | 8 | 10 | 9 |
| Sub-saharan Africa | 5 | 9 | 9 | 10 | 15 | 9 | 9 | 14 | 9 |
| **Amounts rescheduled[a] (millions of dollars)** | | | | | | | | | |
| Developing countries, total | 428 | 8 644 | 3 764 | 6 457 | 12 183 | 19 969 | 9 362 | 18 548 | 5 875[b] |
| Middle-income countries | - | 4 172 | 704 | 3 789 | 2 201 | 6 670 | 6 721 | 6 016 | 110 |
| Lower-middle-income countries | - | 1 635 | 1 939 | 1 692 | 7 502 | 10 962 | 1 342 | 9 312 | 3 320 |
| Low-income countries | 428 | 2 837 | 1 121 | 976 | 2 480 | 1 987 | 973 | 2 466 | 2 445[a] |
| Sub-saharan Africa | 428 | 2 854 | 1 494 | 1 192 | 9 466 | 2 904 | 1 299 | 10 278 | 3 374[a] |
| **Average consolidation period (years)** | | | | | | | | | |
| Developing countries, total | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.4 | 1.5 |
| Middle-income countries | - | 1.1 | 1.0 | 1.1 | 1.2 | 1.1 | 1.4 | 1.6 | - |
| Lower-middle-income countries | - | 1.1 | 1.2 | 1.2 | 1.2 | 1.4 | 1.4 | 1.4 | 1.4 |
| Low-income countries | 1.1 | 1.0 | 1.1 | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 | 1.7 |
| Sub-saharan Africa | 1.1 | 1.0 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.6 |
| **Average maturity on consolidated debt (years)** | | | | | | | | | |
| Developing countries, total | 8.8 | 8.7 | 10.7 | 9.9 | 10.3 | 13.1 | 16.1 | 16.1 | 18.6[c] |
| Middle-income countries | - | .. | 8.8 | 9.1 | 9.9 | 8.1 | 9.4 | 9.4 | 9.3 |
| Lower-middle-income countries | - | .. | 10.0 | 10.1 | 10.1 | 10.4 | 9.0 | 10.1 | 15.1 |
| Low-income countries | 8.8 | .. | 11.8 | 10.6 | 10.5 | 17.6 | 22.0 | 23.8 | 24.2[c] |
| Sub-saharan Africa | 8.8 | 9.8 | 11.4 | 10.5 | 10.3 | 15.9 | 20.7 | 19.3 | 23.0[c] |

*Sources*: UNCTAD, based on Paris Club Agreed Minutes; World Bank, *World Debt Tables*; IMF, *Multilateral Official Debt Rescheduling: Recent Experience* (November 1990); and OECD, *Financing and External Debt of Developing Countries, 1989 Survey.*

[a] Including previously rescheduled debt.

[b] Incomplete; figures not available for meetings that took place after September 1990.

[c] Estimates.

Table A.37. Debt-restructuring agreements with commercial banks: all developing countries, 1983-1990

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|
| Number of agreements | 27 | 26 | 14 | 12 | 19 | 10 | 4 | 6 |
| Amounts rescheduled (billions of dollars)[a] | 47.6 | 91.3 | 23.2 | 72.7 | 89.7 | 79.7 | 6.8 | 11.9 |
| Average consolidation period (years) | 1.5 | 2.8 | 2.8 | 2.8 | 4.0 | 6.5 | 3.3 | 3.9 |
| Average repayment terms: | | | | | | | | |
| Maturity (years) | 6 | 9 | 11 | 10 | 15 | 19 | 16 | 13 |
| Grace (years) | 3 | 3 | 4 | 4 | 5 | 7 | 5 | 4 |
| Spread over LIBOR (percentage) | 2.0 | 1.8 | 1.5 | 1.3 | 1.0 | 0.8 | 0.9 | 0.8 |

*Sources*: World Bank Debtor Reporting System and IMF.

[a] Including previously rescheduled debt.

Table A.38. Value of oil exports of OPEC member countries, 1970-1990[a]
(Millions of dollars)

| Country | 1970 | 1980 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990[b] |
|---|---|---|---|---|---|---|---|---|
| Algeria | 681 | 12 647 | 9 170 | 4 819 | 6 057 | 4 988 | 7 000 | 8 177 |
| Ecuador | 1 | 1 551 | 1 926 | 983 | 724 | 976 | 1 147 | 1 488 |
| Gabon | 62 | 1 745 | 1 629 | 723 | 896 | 779 | 1 200 | 2 136 |
| Indonesia | 446 | 15 595 | 9 083 | 5 501 | 6 157 | 5 189 | 5 716 | 6 613 |
| Iran (Islamic Republic of) | 2 358 | 13 286 | 13 115 | 7 183 | 10 515 | 8 170 | 12 500 | 18 659 |
| Iraq | 788 | 26 296 | 10 686 | 6 905 | 11 416 | 10 952 | 14 500 | 9 708 |
| Kuwait | 1 596 | 17 678 | 9 817 | 6 378 | 7 520 | 6 840 | 10 863 | 6 382 |
| Libyan Arab Jamahiriya | 2 356 | 21 378 | 9 962 | 5 438 | 5 432 | 5 169 | 7 500 | 10 072 |
| Nigeria | 716 | 25 290 | 12 353 | 6 010 | 7 161 | 6 631 | 8 700 | 12 522 |
| Qatar | 227 | 5 406 | 3 068 | 1 720 | 1 829 | 1 709 | 2 000 | 3 059 |
| Saudi Arabia | 2 418 | 105 813 | 24 180 | 16 975 | 19 271 | 19 015 | 24 000 | 45 713 |
| United Arab Emirates | 523 | 19 558 | 11 842 | 7 453 | 8 665 | 7 352 | 11 500 | 15 861 |
| Venezuela | 2 371 | 18 248 | 10 352 | 6 653 | 6 959 | 8 162 | 10 020 | 14 162 |
| **Total** | **14 542** | **284 491** | **127 180** | **76 739** | **92 601** | **85 933** | **116 646** | **154 552** |

*Source*: UN/DIESA, based on *OPEC Annual Statistical Bulletin, 1989.*

[a] Where appropriate, petroleum product exports are included. Data for some countries may include exports of condensate. Starting in 1980, Saudi Arabia data exclude natural gas liquids.

[b] Estimate.

Table A.39. OPEC crude oil production, 1990
(Thousands of barrels per day)

| Country | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Algeria | 780 | 780 | 780 | 780 | 760 | 760 | 780 | 800 | 800 | 800 | 800 | 800 |
| Ecuador | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 290 | 290 | 290 | 290 |
| Gabon | 250 | 250 | 250 | 270 | 240 | 260 | 270 | 270 | 300 | 300 | 300 | 300 |
| Indonesia | 1 240 | 1 240 | 1 260 | 1 270 | 1 250 | 1 280 | 1 250 | 1 290 | 1 320 | 1 320 | 1 320 | 1 400 |
| Iran (Islamic Republic of) | 2 500 | 2 800 | 3 150 | 3 010 | 3 430 | 2 930 | 2 910 | 3 200 | 3 470 | 3 000 | 3 460 | 3 450 |
| Iraq | 3 150 | 3 100 | 3 100 | 3 050 | 3 150 | 3 150 | 3 280 | 700 | 450 | 450 | 450 | 450 |
| Kuwait[a] | 1 975 | 1 975 | 2 075 | 1 900 | 1 900 | 1 860 | 1 910 | 275 | 230 | 230 | 230 | 230 |
| Libyan Arab Jamahiriya | 1 350 | 1 350 | 1350 | 1 300 | 1 300 | 1 300 | 1 300 | 1 350 | 1 430 | 1 600 | 1 550 | 1 550 |
| Nigeria | 1 700 | 1 800 | 1 850 | 1 800 | 1 700 | 1 760 | 1 750 | 1 800 | 1 870 | 1 900 | 1 900 | 1 900 |
| Qatar | 370 | 370 | 370 | 370 | 370 | 370 | 370 | 380 | 430 | 430 | 400 | 360 |
| Saudi Arabia[a] | 5 775 | 5 625 | 5 675 | 5 850 | 5 250 | 5 360 | 5 410 | 5 625 | 7 630 | 7 800 | 8 330 | 8 430 |
| United Arab Emirates | 2 000 | 2 000 | 2 000 | 2 100 | 2 050 | 1 950 | 1 970 | 1 600 | 2 215 | 2 240 | 2 300 | 2 350 |
| Venezuela | 1 950 | 2 050 | 1 950 | 2 000 | 2 000 | 2 000 | 2 000 | 2 000 | 2 250 | 2 300 | 2 300 | 2 350 |
| **Total** | **23 320** | **23 620** | **24 090** | **23 980** | **23 680** | **23 260** | **23 480** | **19 570** | **22 685** | **22 660** | **23 630** | **23 860** |

*Source:* UN/DIESA, based on *Middle East Economic Survey*, 25 March 1991.

[a] Including share of Neutral Zone.

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The *World Economic Survey* is the United Nations Secretariat's annual analysis of major current trends, emerging issues and policies in the world economy.

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